SERVICE MANUAL

FISHER

COMPACT DISC AUDIO COMPONENT SYSTEM WITH WIRELESS REMOTE CONTROL
RTAD-M90

TAD-M90
(EUROPE)

132 357 40

SPECIFICATIONS

Tuner Section

FM

Frequencies received	87.50 ~ 108.00 MHz
DIN pratical sensitivity (mono)	1.2 µV
S/N ratio	70 dB (mono, 1 mV, 40K DEV.)
Harmonic distortion	0.1 % (mono, 1 kHz)
Stereo separation	40 dB (1 kHz)
Image frequency interference ratio	70 dB

MW

Frequencies received	522 ~ 1611 kHz
Pratical sensitivity	700 µV/m
S/N ratio	55 dB
Image frequency interference ratio	35 dB
Selectivity	35 dB
IF interference ratio	65 dB

LW

Frequencies received	153 ~ 360 kHz
Pratical sensitivity	1600 µV/m
S/N ratio	53 dB
Image frequency interference ratio	48 dB
Selectivity	40 dB
IF interference ratio	65 dB

Amplifier Section

Output power (Front)	25 W (T.H.D 0.9 %)
Input sensitivity/impedance	
PHONO	2.5 mV/50 kΩ
AUX	150 mV/50 kΩ

DECK Section

Motor	DC motor (DECK 1 and DECK 2)
Head	Hi-B hard permalloy head (DECK 1 playback head, DECK 2 recording head) Ferrite head (DECK 2 erasing head)
Fast-forward/rewind time	Approx. 110 sec. (C-60 tape)
Tracks	4-track, 2-channel stereo
S/N ratio (playback)	50 dB
Frequency response	40 Hz ~ 14 kHz (metal tape)
Wow and flutter	0.16 % (JIS UNWTD)

CD Player Section

Frequency response	20 Hz ~ 20 kHz
Harmonic distortion	Less than 0.04 % (1 kHz)
S/N ratio	95 dB
Wow and flutter	Below measurable limits
Optical pickup	3-beam laser
Error correction	CIRC
Sampling frequency	44.1 kHz
D/A conversion	16-bit linear
Filter	8 Times Over Sampling Digital filter

General

Power requirements	AC: 220 V, 50 Hz
Power consumption	150 W
Dimensions (WxHxD)	360 x 355 x 309 mm
Weight (approx.)	8.2 kg

Dolby is a registered trademark of Dolby Laboratories Licensing Corporation.

— Specifications and design are subject to change without notice. —

REFERENCE No. WM-570538

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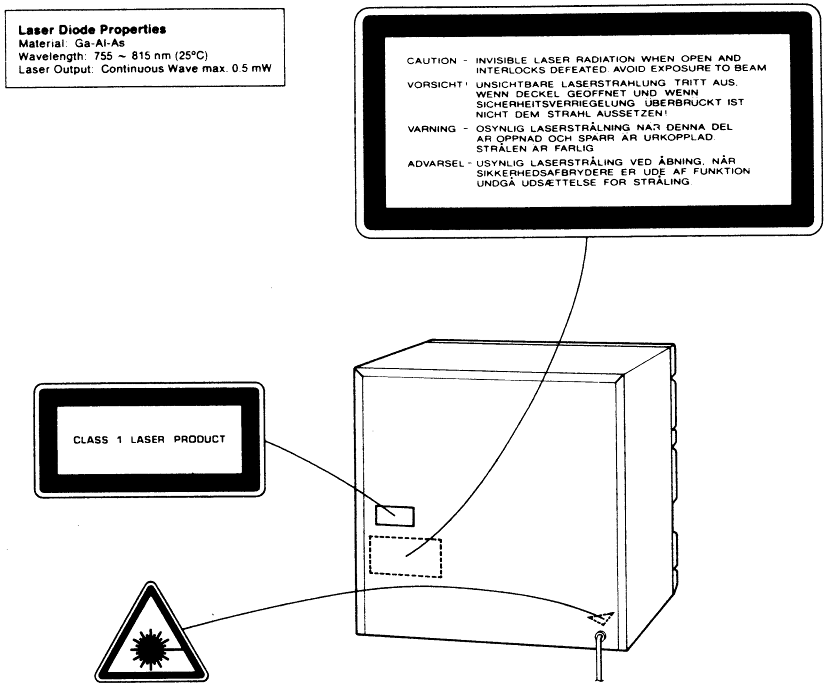
SAFETY CERTIFICATION



Laser Diode Properties
Material: Ga-Al-As
Wavelength: 755 ~ 815 nm (25°C)
Laser Output: Continuous Wave max. 0.5 mW

CAUTION - INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM

VORSICHT! UNSICHTBARE LASERSTRAHLUNG TRITT AUS. WENN DECKEL GEOFFNET UND WENN SICHERHEITSVERRIEGELUNG ÜBERBRÜCKT IST NICHT DEM STRAHL AUSSETZEN!

VARNING - OSYNLIG LASERSTRÅLNING NAR DENNA DEL ÄR OPPNAD OCH SPÄRR ÄR URKOPPLAD. STRÅLEN ÄR FARLIG

ADVARSEL - USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNDGÅ UDSÆTTELSE FOR STRÅLING.

CLASS 1 LASER PRODUCT

CAUTION – USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

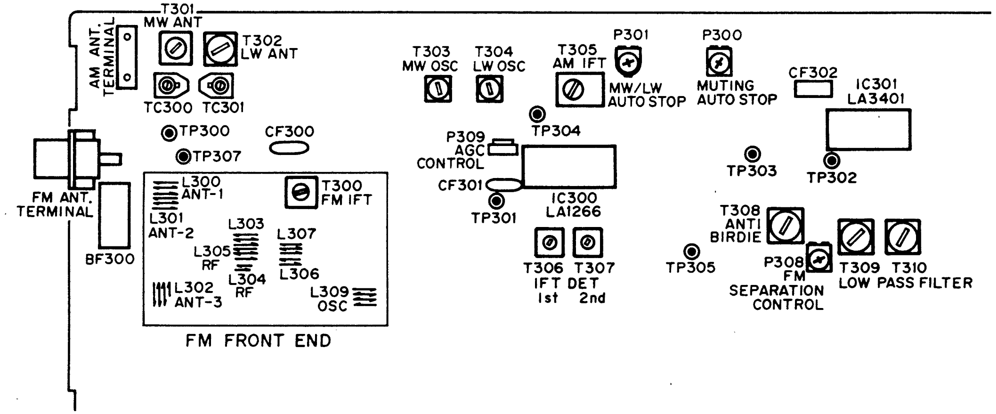
THE UNIT SHOULD NOT BE ADJUSTED OR REPAIRED BY ANYONE EXCEPT QUALIFIED SERVICE PERSONNEL.

CAUTION ON RF ADJUSTMENT

This model uses a microprocessor for memory preset control for the various bands.
This function has been used to preset frequency points for the different bands to permit adjustment and make it possible to check the function of the microprocessor. To use this supplemental function, ground initialize the lead of C600 (+ side) on the Volume P.C.Board for 1 secoud so that the frequency points show in the following table before beginning adjustment. The following table shows the initially preset frequencies.

Band	Memory					
	1	2	3	4	5	6
FM-1	87.5MHz	108MHz	88MHz	98MHz	108Hz	90MHz
MW/LW	603kHz	1404kHz	999kHz	160kHz	350kHz	250kHz

TUNER ADJUSTMENT POINT
(TOP VIEW)



FM Frequency Cover Range
Tuning Voltage Value at TP300
(Table 1)

	87.5MHz	108MHz
Minimum	2.2V	8.0V
Typical	2.3V	8.5V
Maximum	2.4V	9.0V

MW Frequency Cover Range
Tuning Voltage Value at TP300
(Table 2)

	522kHz	1611kHz
Minimum	1.0V	7.0V
Typical	1.3V	8.0V
Maximum	1.4V	9.0V

LW Frequency Cover Range
Tuning Voltage Value at TP300
(Table 3)

	153kHz	360kHz
Minimum	0.7V	6.0V
Typical	0.9V	6.7V
Maximum	1.2V	8.0V

FM TUNER ALIGNMENT

FM ALIGNMENT – Band Selector switch to FM/ST(MUTE) position.
Note is almost unnecessary to adjust coil in Front End as perfectly adjusted.

ITEM	GENERATOR	DIAL SETTING	INDICATOR	PROCEDURE
1. FM IF S-CURVE ALIGNMENT	Connect 10.7MHz Radio IF Genescope output to Test point TP301 and ground lead to chassis. Use 5pF capacitor in series with generator output lead.	Position of non-interference Minimum Frequency.	Connect Radio IF Genescope input to TP302 and ground lead to chassis.	Adjust FM DET 1st Coil (T306) and FM DET 2nd (T307) so that S-wave from becomes symmetrical.
2. FM RF FREQUENCY COVER ALIGNMENT (87.5MHz)	Do not connect Generator.	Set Preset STATION button to "1" position. Set to 87.5MHz.	Connect DC Voltmeter to TP300 and ground lead to chassis. chassis.	Adjust FM OSC Coil (L309) until the DC Voltmeter reads 2.3V ±0.1V.
3. (108MHz)	Same as above.	Change Preset STATION button to "2" position. Set to 108MHz.	Same as above.	Check the DC Voltmeter reads 8.0V ~ 9.0V.
Note: Repeat the adjustments in Items 2 and 3. Then, confirm that each voltage becomes 2.3V to 8.5V at receiving frequency of 87.5MHz to 108MHz. **(See Table 1)**				
4. SENSITIVITY ADJUSTMENT	Connect FM RF Signal Generator through FM Dummy Antenna to FM Antenna terminals. Set Generator to 98MHz. Modulate with 1kHz to provide 40kHz deviation Adjust attenuator output level to 0dB ~ 6dB.	Set Preset STATION button to "4" position. Set to 98MHz.	Connect AC VTVM and Oscilloscope to SPEAKER OUT.	Adjust FM RF Coil (L301, L302, L304, L306) for maximum gain output. **Do not touch the Coil (L300, L303 and L305)**
Note: Repeat the adjustments in Items 4. Then, confirm there is no tracking error.				
5. DETECTOR ADJUSTMENT (MINIMUM T.H.D.)	Same as above. Set generator to 98MHz. Adjust attenuator output level to 60dBμV.	Set MODE switch to FM MONO position and Preset STATION button to "4" posion. Set to 98MHz.	Connect DC Voltmeter across TP303 and TP304.	Adjust FM DET 1st Coil (T306) until the DC Voltmeter reads 0V ±50mV.
			Connect Harmonic Distortion Analyzer to SPEAKER OUT.	Adjust FM DET 2nd Coil (T307) for minimum gain and best linearity. Then adjust FM IFT (T300) and minimize the distortion.
Note: Repeat Step 1 (FM DET 1 Coil T306) and 2 (FM DET 2 Coil T307) until optimum alignment is reached.				
6. FM STEREO SIGNAL SEPARATION CONTROL	Connect FM Stereo SG to FM Antenna terminals. Set Generator output level to 60dBμV at 98MHz stereo signal (Main 40kHz, Pilot-6.75kHz) from LEFT channel.	Same as above Set MODE switch to FM STEREO position.	Connect AC VTVM and Oscilloscope to SPEAKER OUT.	Adjust P308 for minimum output.
	Same as above for RIGHT channel.		Connect AC VTVM and Oscilloscope to SPEAKER OUT.	
7. FM MUTING AUTO STOP SENSITIVITY ADJUSTMENT	Set generator to 98MHz. Adjust attenuator output level to 22dBμV.	Same as above.	Front panel TUNED Indicator Display.	Adjust P300 until the TUNED Indicator partly light up.
8. FM AGC ADJUSTMENT	Change generator Setting to output level to 60dBμV.	Same as above.	Connect DC Voltmeter to TP307 and ground lead to chassis.	Adjust P309 until the DC Voltmeter reads 150mV±10mV.
Note: Decrease the output level of ATT and confirm that the wave form disappears. Increase the output level of ATT again and confirm that the input level meets the specifications sufficiently when the wave form has appeared.				

Use a screwdriver with plastic grip for all adjustments.

AM TUNER ALIGNMENT

AM ALIGNMENT – Band Selector switch to MW or LW position.
Maintain generator output as low as possible for suitable indication.

Note: Perform this alignment after FM Tuner Alignment.

ITEM	GENERATOR	DIAL SETTING	INDICATOR	PROCEDURE
1. AM IF ALIGNMENT	Connect 450kHz Radio IF Genescope output to TM300 (ANT) and GND. Adjust output level to 70dBμV.	Position of non-interference Minimum Frequency.	Connect Radio IF Genescope input to TP305 and ground lead to chassis.	Adjust AM IFT (T305) for maximum gain and best symmetry. Keep signal low enough for noise on response.
2. MW RF FREQUENCY COVER ALIGNMENT (1611kHz)	Do not connect generator.	Front Panel DIGITAL Counter Display Set to 1611kHz.	Connect DC Voltmeter to TP300 and ground lead to chassis.	Adjust MW OSC (T303) until the DC Voltmeter reads 7.0V ~ 9.0V.
3. (522kHz)	Same as above.	DIGITAL Counter Display Set to 522kHz.	Same as above.	Check DC Voltmeter for Indication 1.0V ~ 1.4V.
Note: Repeat the adjustments in items 2 and 3. Then, confirm that each voltage becomes 1.3V to 8.0V at receiving frequency of 522kHz to 1611kHz. **(See Table 2)**				
4. LW RF FREQUENCY COVER ALIGNMENT (360kHz)	Do not connect generator.	Front Panel DIGITAL Counter Display Set to 360kHz.	Connect DC Voltmeter to TP300 and ground lead to chassis.	Adjust LW OSC (T304) until the DC Voltmeter reads 6.0V ~ 8.0V.
5. (153kHz)	Same as above.	DIGITAL Counter Display Set to 153kHz.	Same as above.	Check DC Voltmeter for Indication 0.7V ~ 1.2V.
Note: Repeat the adjustments in Items 4 and 5. Then, confirm that each voltage becames 0.9V to 6.7V at receiving frequency of 153kHz to 360kHz. **(See Table 3)**				
6. MW RF TRACKING ALIGNMENT (603kHz)	Connect Standard Loop Antenna to output terminal of AM RF Signal Generator. Place Loop Antenna 60cm away from Loop antenna (Unit). Generator Setting to 603kHz or 1404kHz. Modulate with 400Hz (30 % modulation).	Set Preset STATION button to "1" position. Set to 603kHz.	Connect AC VTVM and Oscilloscope to SPEAKER OUT.	Adjust MW ANT Coil (T301) for maximum gain output.
7. (1404kHz)		Change Preset STATION button to "2" position. Set to 1404kHz.	Same as above.	Adjust MW ANT Trimmer (TC300) for maximum gain output.
Note: Repeat the adjustments in Items 6 and 7. Then, confirm there is no tracking error.				
8. LW RF TRACKING ALIGNMENT (160kHz)	Change generator setting to 160kHz.	Set Preset STATION button to "4" position. Set to 160kHz.	Connect AC VTVM and Oscilloscope to SPEAKER OUT.	Adjust LW ANT Coil (T302) for maximum gain output.
9. (350kHz)	Change generator setting to 350kHz.	Change Preset STATION button to "5" position. Set to 350kHz.	Same as above.	Adjust LW ANT Trimmer (TC301) for maximum gain output.
Note: Repeat the adjustments in Items 8 and 9. Then, confirm there is no tracking error.				
10. AM AUTO STOP SENSITIVITY ADJUSTMENT	Change generator setting to 999kHz and output level to 60dBμV/m.	Set Preset STATION button to "3" position. Set to 999kHz.	Front Panel TUNED Indicator Display.	Adjust P301 until the Indicator partly light up.

Use a screwdriver with plastic grip for all adjustments.

CD PLAYER ADJUSTMENT PROCEDURES

BEFORE CHECKING OR ADJUSTING CD PLAYER

1. Procedures for all adjustments for the CD player from start to finish are described below.
2. If no problems are found after each item is checked when the pick-up is replaced, there is no need to adjust all items again.

SETTING OF INITIAL POSITION OF VOLUME

1. Set the potentiometer to the initial positions listed below:

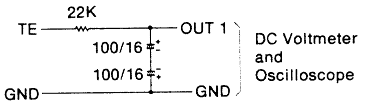
P53 (E/F BALANCE)	Mechanical Center
P54 (TRACKING GAIN)	Mechanical Center
P55 (TRACKING OFFSET)	Mechanical Center
P56 (KICK GAIN)	Mechanical Center

FREE RUN FREQUENCY ADJUSTMENT

1. Connect the frequency counter to **PCK** test terminal (TP52-5) pin and to **GND.** (Use a 10:1 probe.)
2. Short the **DSP OFF** test terminal (TP54-1) pin to **GND** (TP54-4) pin.
3. Push the POWER button to switch the power on and push the STOP button.
4. Adjust the PLL Coil (T51) using a plastic screwdriver until the frequency counter indicator reads 4.3218MHz ±5kHz.

E/F BALANCE ADJUSTMENT

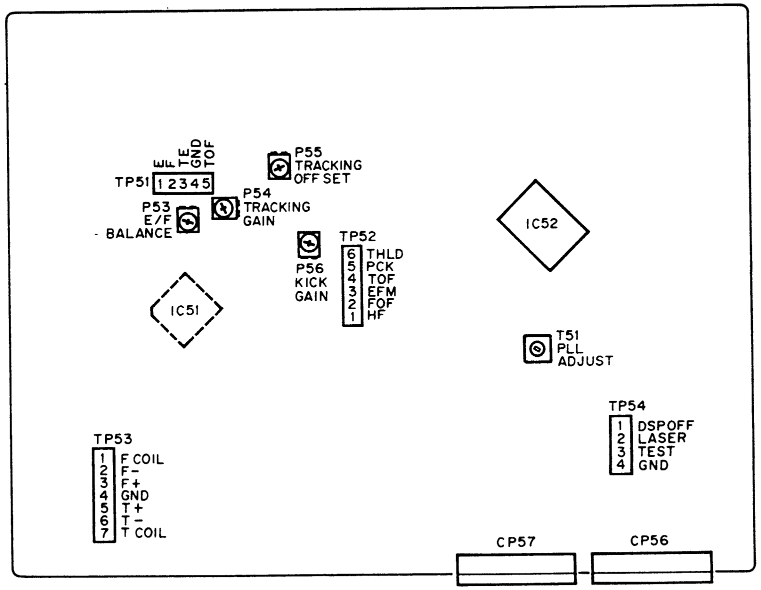
1. Place the test disc (Modern Wave Ⅱ) on the Disc Tray, and play the fourth item on the disc.
2. Short the **TEST** test terminal (TP54-3) pin to **GND**, and **TROF** test terminal (TP51-5) pin to **GND** to turn tracking servo OFF.
3. Connect a DC Voltmeter and an oscilloscope via the low-pass filter like that shown in the illustration below to the **TE** (tracking error) test terminal (TP51-3) pin.



Measurement circuit

4. Adjust the potentiometer (P53) so that the DC Voltmeter reading is 0V±50mV (oscilloscope waveform is symmetric to + and – about the zero level).

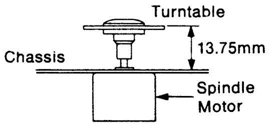
CD PLAYER ADJUSTMENT POINTS
(TOP VIEW)



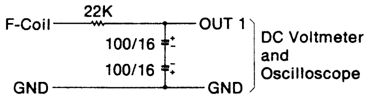
ADJUSTMENT OF TURNTABLE HEIGHT

This adjustment must be performed when the Spindle Motor is replaced.

1. The turntable should be mounted so that its upper surface is 13.75mm±0.1mm above the surface of the chassis.



2. Place the test disc (Modern Wave Ⅱ) on the turntable.
3. Connect a DC Voltmeter and an oscilloscope via the low-pass filter shown below to the **FOCUS COIL** test terminal (TP53-1) pin.

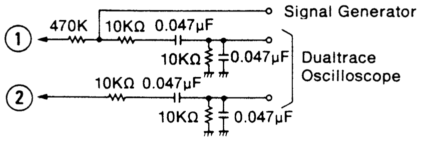


Measurement circuit

4. Push the POWER button to switch the power on and PLAY the First and Last Track No. on the disc.
5. If the DC Voltmeter reading is not in the ranges 0V±0.2V for inner tracks and 0V±0.35V for outer tracks, then the turntable height must be readjusted. Raise the turntable higher if the DC Voltmeter indicator is on the plus (+) side, and lower it if it is on the minus (−) side.
(With this circuit 1V represents movement of approximately 0.60mm ~ 0.80mm.)

TRACKING GAIN ADJUSTMENT

The measurement circuit diagrammed below must be used in order to adjust focus gain and tracking gain correctly.



Measurement circuit

1. Apply the potentiometer (P54) to the position of mechanical center position, and place the test disc (Modern Wave Ⅱ) on the Disc Tray.
2. Connect the **T** minus (−) test terminal (TP53-6) pin to measurement circuit No.1 terminal.
3. Connect the **T** plus (+) test terminal (TP53-7) pin to measurement circuit No.2 terminal.
4. Push the POWER button to switch the power on and PLAY the first item on the test disc. Now apply a signal of 1100Hz and 0.3Vrms from the signal generator to the measurement circuit.
5. Set the oscilloscope to X-Y operation, and while observing the lissajous waveform adjust the potentiometer (P54) to the point where the phase difference is 90° as shown in Fig. 1 below.

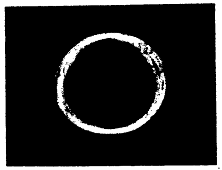


Fig. 1

NOTE:
If these two adjustments are performed, the TRACKING OFFSET must also be adjusted.

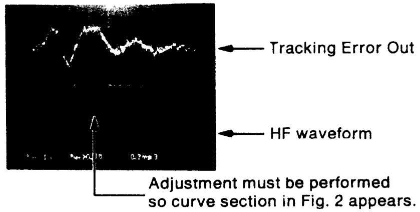
TRACKING OFFSET ADJUSTMENT

1. Push the POWER button to switch the power on and push the STOP button.
2. Connect a DC.Voltmeter to the **T** (tracking coil) test terminal (TP53-7) pin and short the **TOF** test terminal (TP52-4) pin to **GND.**
3. In this condition check that the DC Voltmeter indicator is in the range 100mV±20mV, and adjust the potentiometer (P55) if it is not.

NOTE:
Perform this adjustment once again after adjusting the E/F BALANCE and TRACKING GAIN signals.

KICK GAIN ADJUSTMENT

1. Place the test disc (Modern Wave Ⅱ) on the Disc Tray.
2. Set the oscilloscope to NORMAL TRIG., set the EXT. TRIG. pin to external trigger, and input the trigger from **THLD** test terminal (TP52-6) pin to the oscilloscope.
3. Next connect the **HF** test terminal (TP52-1) pin to Channel 1 of the oscilloscope, and connect the **TE** test terminal (TP51-3) pin to Channel 2.
4. Push the POWER button to switch the power on and PLAY the first item on the test disc, and the push the PAUSE button. Now observe the waveforms for **HF** and **TE** with triggers applied from the **THLD** test terminal (TP52-6) pin. At this point, adjust the potentiometer (P56) so that a kick pulse waveform of about 1 to 1.3 tracks as shown in Fig. 2 below is obtained.



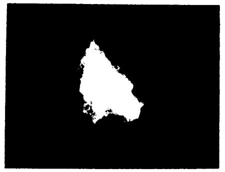
Adjustment must be performed so curve section in Fig. 2 appears.

Fig. 2

DIFFRACTION GRID ADJUSTMENT

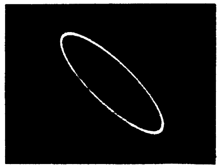
Diffraction grating adjustment is performed for a single pick-up, so if the following checks are performed adjustment is unnecessary.

1. Place the test disc (Modern Wave Ⅱ) on the disc Tray, and play the fourth item on the disc. Shout the **TEST** terminal (TP54-3) pin to **GND**, and **TROF** test terminal (TP51-5) pin to GND to turn tracking servo OFF.
2. Next connect **E** test terminal (TP51-1) pin to channel 1 of the oscilloscope, and connect **F** test terminal (TP51-2) pin to channel 2.
3. Set the oscilloscope to X-Y operation, and while of serving the lissajous wave form check the wave form is a straight line with a phase difference of 180° as shown in Fig. 3.



(Optimum Figure)

Fig. 3



(Limiting Figure)

Fig. 4

4. The wave form shown in Figure 3 shows the optimum condition. Adjustment range of diffraction grating will be effective range if it shows within the range of ±30° as shown in Fig. 4.
5. Next, push the PLAY button, and set the oscilloscope in the DUAL MODE so that both **E** and **F** outputs can be seen. Set the DISPLAY TIME to 5μs. Now, adjustment is complete if the waveforms shown below in Fig. 5 (Channel 1 trigger) are obtained.

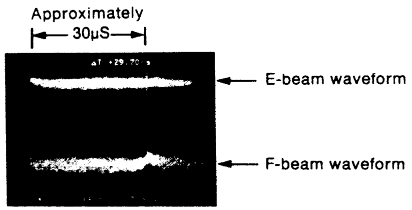


Fig. 5

CASSETTE DECK ELECTRICAL ADJUSTMENTS

BEFORE ADJUSTMENT

If the tape surface which contacts the head, the capstan, and the pinch roller, etc., is stained, it will cause unstable running of the tape, wow and flutter, inperfect recording and erasing, deterioration of tonal quality, and the tape jam around the capstan, etc. Occasionally clean each part as follows;

1. Cut off power.
2. Open the cassette lid.
3. Wipe the head, the capstan, and the pinch roller with a cotton swab. If they are excessively stained, clean them with the swab soaked in absolute alcohol or cleaning liquid on the market.

MEASURING INSTRUMENTS REQUIRED

- Dualtrace Oscilloscope
- AC VTVM (AC voltmeter with high impedance)
- Dummy Load (47kΩ)
- Frequency Counter
- Signal Oscillator
- Test Tapes
    - 10kHz Test Tape (Example: TEAC MTT-114) for Azimuth Adjustment
    - 3kHz Test Tape (Example: TEAC MTT-111) for Tape Speed Adjustment
    - 400Hz Test Tape (Example: TEAC MTT-150) for Playback sensitivity Adjustment
- Test Tape for Recording and Playback Operations
    - Normal Tape (Example: TDK AC 223)
    - CrO_2 Tape (Example: TDK AC 512)

SWITCH POSITIONS

Unless especially indicated, set each switch as follows;

DOLBY Switch	OFF
SPEED Switch	NORMAL
TAPE SELECT Switch	NORMAL
DUBBING Switch	OFF
FUNCTION Switch	TAPE

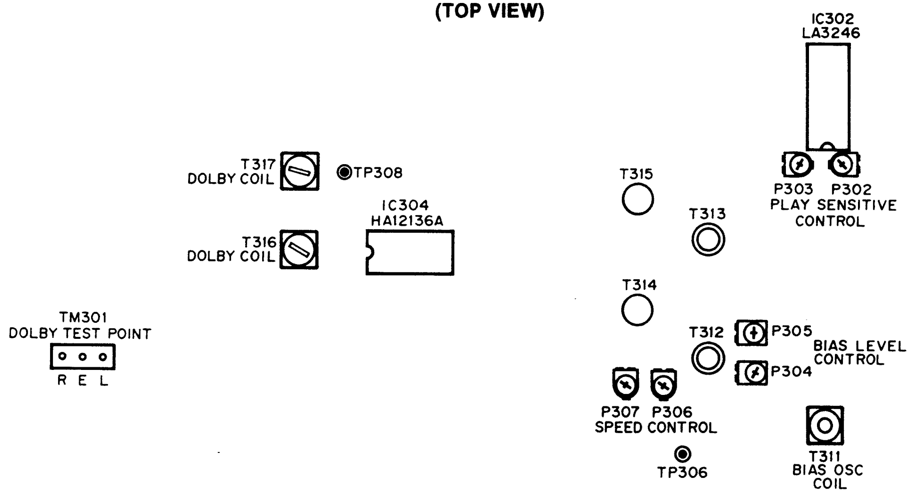
NORMAL TAPE SPEED ADJUSTMENT

1. Connect the dummy load (8Ω) and the frequency counter to the Speaker terminal.
2. Load Deck 2 with a test tape (Example: TEAC MTT-111) and set it in the playback mode.
3. Then adjust P306 on the MAIN P.C.Board so that the output becomes 3,000Hz~3,030Hz.

HIGH SPEED TAPE SPEED ADJUSTMENT

1. Connect the dummy load (8Ω) and the frequency counter to the Speaker terminal.
2. Short circuit TP306 and GND.
3. Load Deck 2 with a test tape (Example: TEAC MTT-111) and set it in the playback mode.
4. Then adjust P307, so that the output becomes 5,940Hz~6,060Hz.
5. Open circuit TP306 and GND.

DECK CONTROL ADJUSTMENT POINTS
(TOP VIEW)



CASSETTE DECK ELECTRICAL ADJUSTMENTS (Continued)

HEAD AZIMUTH ADJUSTMENT

1. Connect the dualtrace oscilloscope and AC VTVM to the Dolby test point TM301-L and TM301-R (Left and Right channel) on the MAIN P.C.Board.

Then, set the dualtrace oscilloscope as follows:

MODE	CHOP (chopped)
SOURCE	INT (internal), CH1 or CH2
SWEEP MODE	AUTO (automatic)

NOTE:
Adjust the field on the oscilloscope with the VOLT. ADJ. and TIME ADJ.

2. Load Deck 2 with a test tape (Example: TEAC MTT-114) and set it in the playback mode.
3. Adjust the head azimuth adjustment screw, so that the wave forms become maximum on the oscilloscope and the Right channel wave form overlaps with the Left channel one.
4. Repeat the above several time.
5. Adjust Deck 2 in the same way as for Deck 1.
6. After the adjustment, secure the adjusting screw with paint or glue.

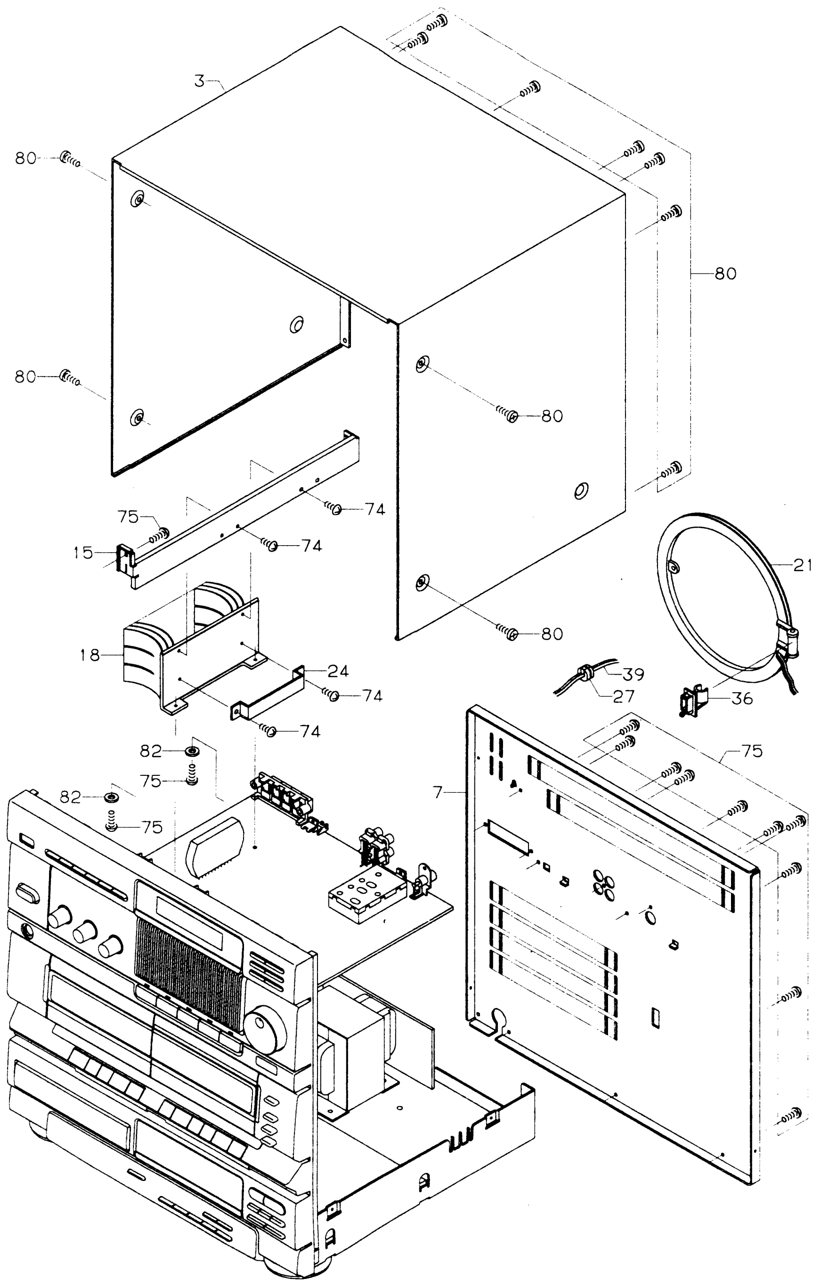
PLAYBACK SENSITIVITY ADJUSTMENT

1. Connect the oscilloscope and AC VTVM to the Dolby test point TM301-L and TM301-R (Left and Right channel) on the MAIN P.C.Board.
2. Load Deck 2 with a test tape (Example: TEAC MTT-150) and set it in the playback mode.
3. Adjust potentiometer P303 (Left Channel), so that the output level becomes 580mV ±0.5dB.
4. Adjust potentiometer P302 for the Right channel by following the same procedures as described for the Left channel.
5. After the adjustment, Load Deck 1 with a test tape (Example: TEAC MTT-150) and set it in to playback mode.
6. Checking the AC VTVM for Indication 580mV ±1dB.

RECORDING BIAS LEVEL ADJUSTMENT (DECK2)

1. Connect the audio signal generator to the Left channel of the AUX input terminal, and the AC VTVM to the Dolby test point TM301-L and TM301-R (Left and Right channel) on the MAIN P.C.Board.
2. Load Deck 2 with a normal tape (Example: TDK AC223) and set it in the recording mode.
3. Function switch to the AUX position.
4. Set the Input Level ATT so that the output level becomes 33mV and feed the signals of 1kHz and 12.5kHz from the audio signal generator into the unit. Then, record the signals on the tape.
5. Playback the recorded signals and adjust potentiometer P305 for the Left channel, so that the difference in output of the 1kHz and 12.5kHz signals become ±1dB.
6. Adjust potentiometer P304 for the Right channel by following the same procedures as described for the Left channel.

CABINET EXPLODED VIEW (1)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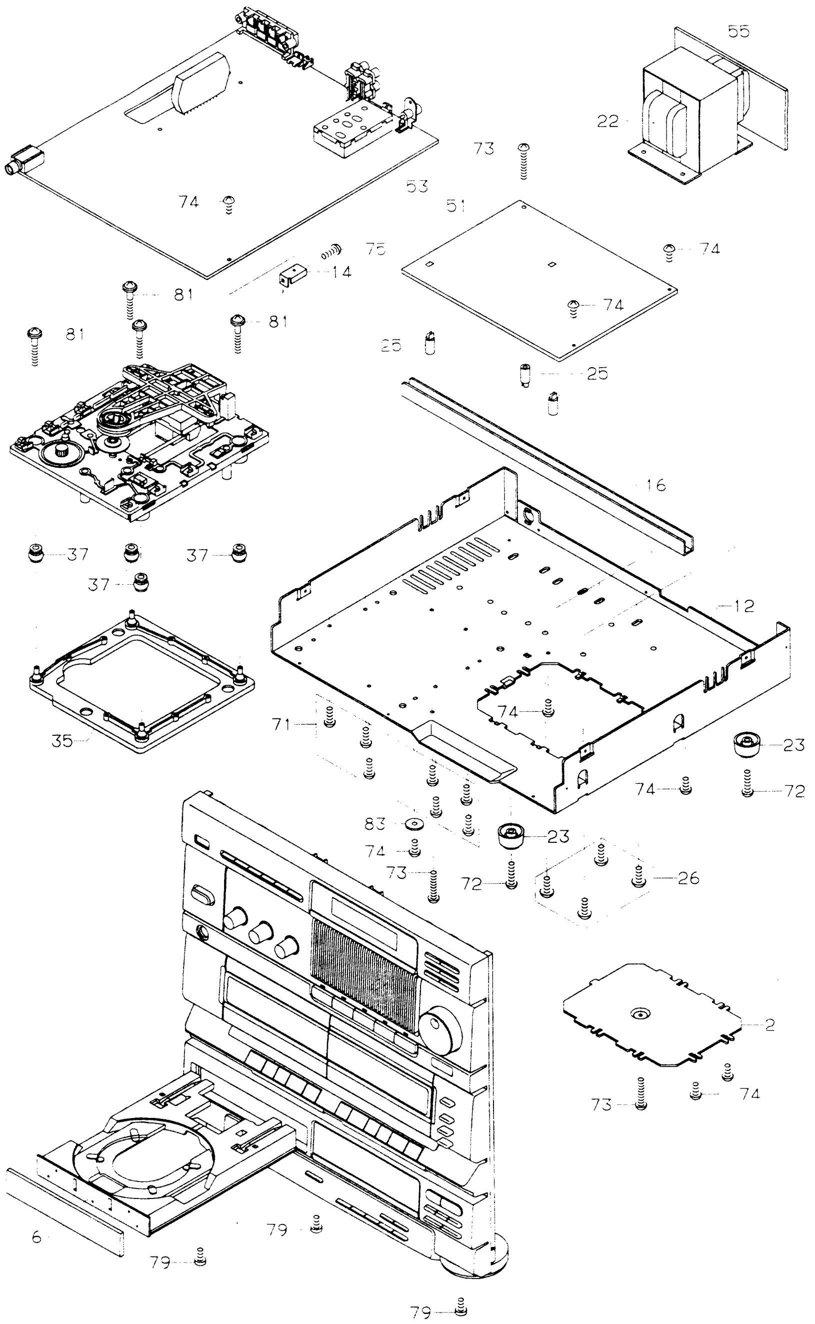
CABINET EXPLODED VIEW (2)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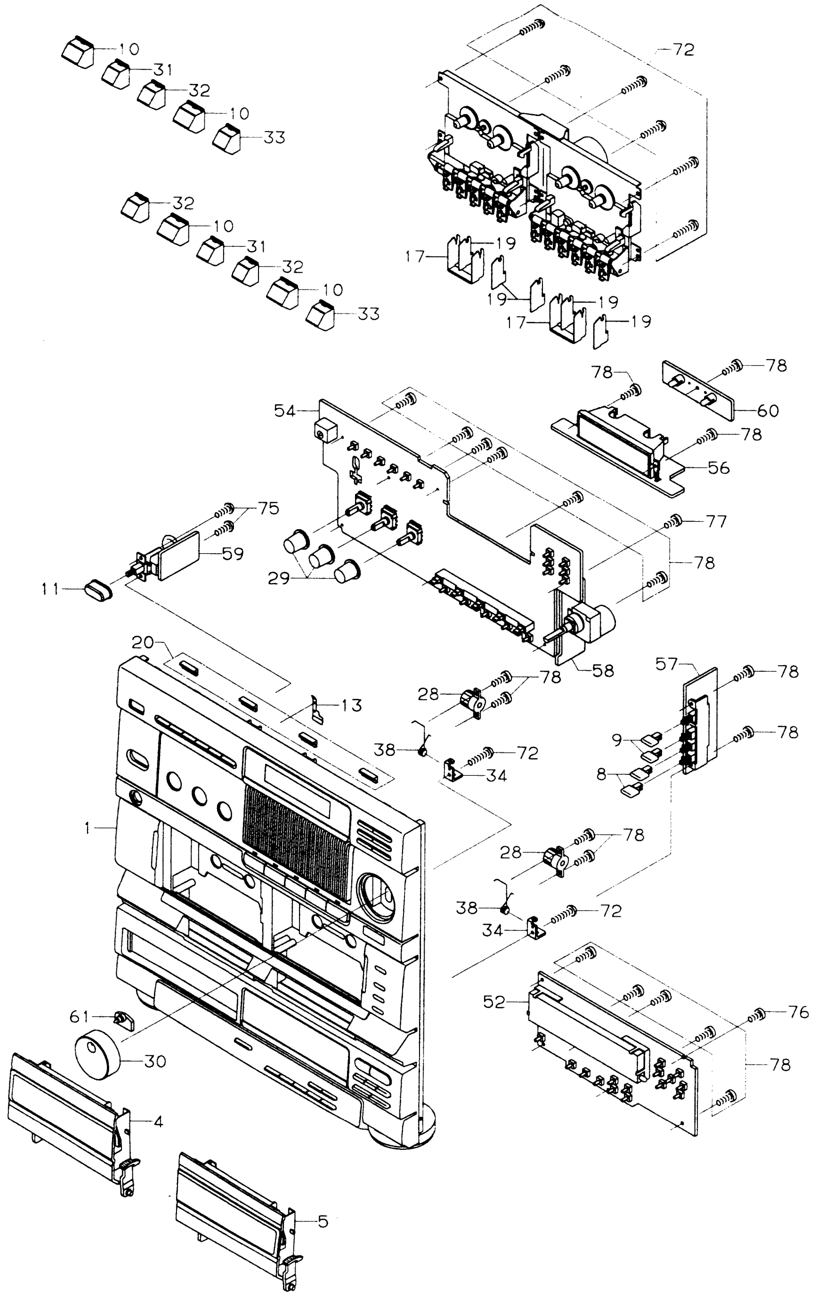
CABINET EXPLODED VIEW (3)



CABINET PARTS LIST

Ref. No.	Part No.	Description	Q'ty
PACKAGE			
	620 207 1671	Inner Carton	1
	620 207 1534	Pad,Bottom	1
	620 207 1541	Pad,Top	1
	620 059 3533	Pad (Roop-ANT)	1
	620 148 5691	Poly Cover 100 x 250	1
	620 189 6732	Patching Sheet	1
	620 189 6749	Sheet Polyethylene	1
	620 152 7452	Serial No. Sheet	2
ACCESSORIES			
	411 123 3906	SCR TPG BIN 3X10	2
	620 207 6959	Remocon,M90	1
	620 207 7086	Instruction Manual	1
	620 208 9102	Label,Barcode	1
	620 038 1673	FM Antenna Assy	1
	620 057 8783	Bag Fan	1
	620 062 0543	Serial No. Sheet	1
or	620 152 7452	Serial No. Sheet	1
	620 113 5312	Stand Loop Antenna	1
or	620 113 5305	Stand Antenna	1
	620 148 4571	Poly Cover	1
	620 152 2624	Certificate Card	1
CABINET			
	620 207 9608	Assy,Wire,1P	1
	620 208 7313	Assy,Wire,1P	1
	620 050 2887	Cramp Wire	1
	620 061 2340	Notes (Laser)	1
	620 061 2401	Notes (Laser)	1
	620 061 2418	Notes (Laser)	1
	620 116 2387	Adhesive Sheet	1
	620 189 4424	Adhesive Sheet	4
	620 125 8424	Wire Band	15
	620 152 7452	Serial No. Sheet	1
	620 188 6184	Connector 9P Assy [CA55]	1
1	620 207 0643	Assy,Cabinet,Front	1
2	620 207 0612	Cover,Bottom	1
3	620 207 0636	Cover	1
4	620 206 5588	Lid,Cassette,Left	1
5	620 206 5595	Lid,Cassette,Right	1
6	620 206 5823	Decoration,CD	1
7	620 207 0599	Panel,Rear	1
8	620 197 8315	Knob,Dolby	2
9	620 198 1650	Knob,Tape Select	2
10	620 207 1695	Knob,Play	4
11	620 206 6936	Button,Power	1
12	620 207 0506	Chassis	1
13	620 208 7290	Bracket-E	1
14	620 207 1220	Bracket-M,PCB Main	1
15	620 207 0544	Bracket-M,Heat Sink	1
16	620 209 3789	Bracket-M,Chassis	1
17	620 196 1164	Support,Spindle	2
18	620 207 2050	Heat Sink	1
19	620 196 6015	Spacer	5
20	620 209 6056	Spacer	4
21	620 199 8337	Loop Antenna,LA300B	1
22	⚠ 620 207 8441	Power Trans,SEV,80VA	1
23	620 047 3866	Leg	2
24	620 048 2608	Metal Mount (IC)	1
25	620 050 4409	Mount P.C.B	3
26	620 051 4149	Screw C-Tite 4X8 Z1	4
27	620 053 2136	Bushing (Power Cord)	1
28	620 083 1772	Gear Eject Assy	2
29	620 183 8824	Knob-Balance	3
30	620 188 4579	Knob Volume	1
31	620 192 7115	Knob REW	2
32	620 192 7122	Knob FF	3
33	620 192 7139	Knob Pause	2
34	620 192 7146	Bracket Lid	2
35	620 117 6698	Bracket CD	1
36	620 122 2210	Holder Antenna	1
37	620 124 3437	Cushion Rubber	4
38	620 192 7191	Spring Lid	2
39	⚠ 620 023 7550	Power Cord	1
51	620 207 8755	Assy,PCB,CD Main,M90	1
52	620 207 8762	Assy,PCB,CD Control,M90	1
53	620 207 8892	Assy,PCB,Main	1
54	620 207 8908	Assy,PCB,Control	1
55	620 207 8939	Assy,PCB,Power	1
56	620 207 8953	Assy,PCB,LCD	1
57	620 207 8960	Assy,PCB,Switch	1
58	620 207 8977	Assy,PCB,Volume	1
59	620 207 8984	Assy,PCB,Power Switch	1
60	620 207 8991	Assy,PCB,Lamp	1
61	620 207 9004	Assy,PCB,Volume Indicator	1
71	411 020 5904	SCR S-TPG BRZ 3X10	7
72	411 020 6208	SCR S-TPG BRZ 3X12	10
73	411 020 7007	SCR S-TPG BRZ 3X20	3
74	411 020 7700	SCR S-TPG BRZ 3X6	12
75	411 020 8004	SCR S-TPG BRZ 3X8	16
76	411 021 2506	SCR S-TPG BIN 2.6X5	1
77	411 021 2704	SCR S-TPG BIN 2.6X6	1
78	411 021 3107	SCR S-TPG BIN 2.6X8	20
79	411 021 5705	SCR S-TPG BIN 3X6	3
80	411 021 6603	SCR S-TPG BIN 3X8	11
81	412 024 6300	SPECIAL SCREW	4
82	411 008 1300	WASHER SPR 3	2
83	411 092 7806	WASHER Z 3.2X16X1	1

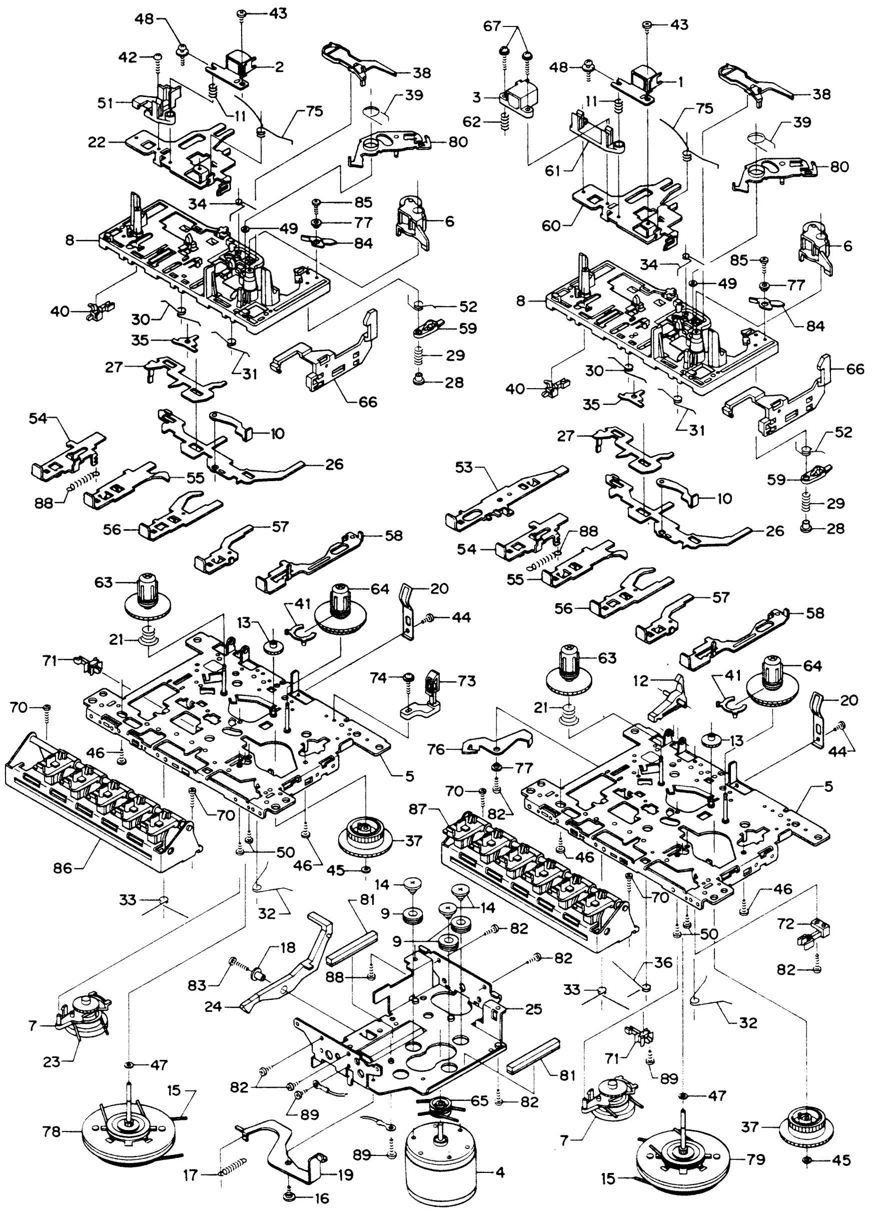
NOTES:

1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with ⚠, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

CASSETTE DECK MECHANISM EXPLODED VIEW



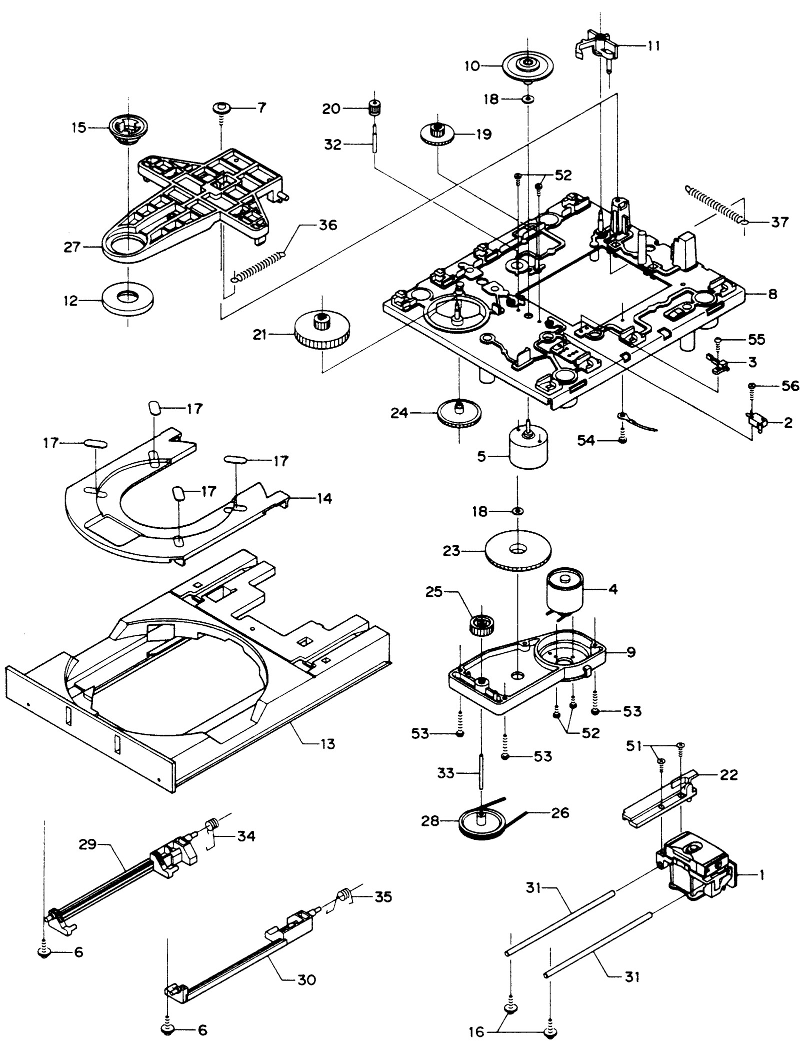
CASSETTE DECK MECHANISM PARTS LIST

Ref. No.	Part No.	Description	Q'ty
MECHANISM			
	411 021 2704	SCR S-TPG BIN 2.6X6	1
	620 207 9516	Assy,Wire,2P	1
	620 207 9547	Assy,Wire,3P	1
	620 207 9530	Assy,Wire,6P	1
	620 207 9561	Assy,Wire,8P	1
	620 207 9578	Assy,Wire,9P	1
	620 206 8299	TN-21ZSW-721	1
C1	403 049 5508	ELECT 10U M 50V	1
1	620 195 1349	Head,R/P [HD2]	1
2	620 195 1356	Head,Play [HD1]	1
3	620 023 2166	Erase Head [HD3]	1
4	620 195 1424	Motor [M1]	1
5	620 185 7870	Assy Chassis	2
6	620 185 7887	Assy Pinchroller	2
7	620 185 7900	Assy RF	2
8	620 198 1209	Assy Chassis Sub	2
9	620 185 7962	Cushion Motor	3
10	620 198 1186	Lever Stop Eject	2
11	620 185 7986	Spring Azimuth	2
12	620 185 7993	Lever Interlock	1
13	620 185 8006	Gear FF	2
14	620 185 8013	Special Screw	3
15	620 199 7873	Belt Main	2
16	620 185 8037	Special Screw	1
17	620 185 8044	Spring Lever Kick	1
18	620 185 8051	Spacer	1
19	620 185 8068	Lever Kick A	1
20	620 185 8075	Spring Cassette	2
21	620 185 8082	Spring Back Tension	2
22	620 198 1162	Slide Base	1
23	620 185 8143	Belt RF	2
24	620 185 8174	Lever Kick B	1
25	620 185 8181	Bracket Motor	1
26	620 185 8266	Plate Lock	2
27	620 185 8273	Plate Switch	2
28	620 185 8297	Bush Lever Pause	2
29	620 185 8303	Spring Lever Pause	2
30	620 185 8327	Spring Rod A	2
31	620 185 8334	Spring Rod B	2
32	620 185 8341	Spring Plate Lock	2
33	620 185 8358	Spring Plate Switch	2
34	620 185 8365	Spring Control	2
35	620 185 8389	Stopper PR	2
36	620 185 8396	Spring Rod Record	1
37	620 185 8402	Gear Take UP	2
38	620 185 8419	Lever Sensor	2
39	620 185 8426	Spring Plate Gear	2
40	620 185 8433	Leaf Switch [S5,S6]	2
41	620 185 8501	Sensor	2
42	620 185 8853	PAN 2X6	1
43	620 185 8860	BIN 2X3	2
44	620 185 8877	S-TPG 2X3	2
45	620 185 8884	Special Washer	2
46	620 185 8891	S-TPG BIN 2X5	4
47	620 185 8907	Special Washer	2
48	620 185 8914	Special Screw	2
49	620 206 1214	HL Washer	2
50	620 185 8938	Special Screw	4
51	620 189 3731	Base Head	1
52	620 189 3755	Spring Latch Pause	2
53	620 195 0502	Rod Record	1
54	620 195 0526	Rod Play	2
55	620 195 0571	Rod Rewind	2
56	620 195 0595	Rod FF	2
57	620 198 1179	Rod Stop	2
58	620 195 0656	Rod Pause	2
59	620 195 0663	Lever Latch Pause	2
60	620 198 1155	Slide Base	1
61	620 195 0687	Base Head	1
62	620 195 0700	Spring Erase Head	1
63	620 195 0717	Assy,Reel Supply	2
64	620 195 0724	Assy,Reel Take UP	2
65	620 195 0731	Pulley Motor	1
66	620 195 0748	Lever Eject	2
67	620 195 0755	Special Screw	2
70	620 195 0816	S-TPG 2X8	4
71	620 195 0823	Leaf Switch [S3,S4]	2
72	620 195 0830	Leaf Switch [S2]	1
73	620 195 0847	Leaf Switch [S1]	1
74	620 195 0854	Special Screw	1
75	620 195 0861	Spring.	2
76	620 195 0878	Arm Record	1
77	620 195 0892	Collar	3
78	620 185 7931	Assy Flywheel PB	1
79	620 185 7924	Assy Flywheel R/P	1
80	620 195 0922	Assy Plate Gear	2
81	620 195 0939	Cushion	1
82	620 195 0946	S-TPG 2X4	7
83	620 195 0953	S-TPG 2X6	1
84	620 196 2109	Arm Pause	2
85	620 196 2154	PS-TPG M2X3.5	2
86	620 196 4387	Assy,Frame,Button	1
87	620 196 4394	Assy,Frame,Button	1
88	620 198 1193	Spring Rod Play	2
89	620 199 8665	S-TPG 2X5	1

NOTES:

1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

CD PLAYER MECHANISM EXPLODED VIEW



CD PLAYER MECHANISM PARTS LIST

Ref. No.	Part No.	Description	Q'ty
CD MECHANISM			
	620 202 7210	Label,Identification	1
	620 125 8424	Wire Band	2
1	620 201 5774	Assy,Pickup,Laser,90	1
2	620 015 3744	Lever Switch 1P1T (Lid Open)	1
3	620 016 2401	Leaf Switch (Pickup Inner)	1
4	620 189 0426	Motor (Sled Motor) [M2]	1
5	620 189 0433	Motor (Spindle Motor) [M3]	1
6	620 051 4279	Screw 3X8	2
7	620 051 4316	Screw 3X10	1
8	620 081 5963	Chassis Assy	1
9	620 185 9898	Chassis Sub Assy	1
10	620 082 7478	Turntable Assy	1
11	620 083 3974	Arm Assy	1
12	620 085 6553	Magnet Assy	1
13	620 201 5101	Table,Loading	1
14	620 185 9911	Table CD	1
15	620 119 1530	Holder Disc	1
16	620 123 0772	Screw Washer 2.6X6	2
17	620 184 9905	Pad Disc (Felt)	4
18	620 125 1487	Washer M1.9X7.0X0.25	2
19	620 127 9429	Gear Pickup	1
20	620 127 9436	Gear Motor	1
21	620 127 9467	Gear Table Load	1
22	620 127 9474	Gear Pickup Rack	1
23	620 185 9973	Gear Load Pickup	1
24	620 185 9980	Gear Load T.L	1
25	620 185 9997	Gear	1
26	620 186 0009	Belt	1
27	620 129 5986	Flap Disc Cramp	1
28	620 186 0023	Pulley	1
29	620 186 0030	Lever Hold Disc Left	1
30	620 186 0047	Lever Hold Disc Right	1
31	620 133 4081	Shaft Pickup	2
32	620 133 4098	Shaft Gear S	1
33	620 186 0054	Shaft Pulley	1
34	620 186 0061	Spring Lever Left	1
35	620 186 0078	Spring Lever Right	1
36	620 139 1558	Spring Flap Disc CR	1
37	620 139 1565	Spring Arm	1
51	411 108 0104	SCR FLT PCS 2X5	2
52	411 099 0701	SCR PAN PCS 1.7X3	4
53	411 020 5409	SCR S-TPG BRZ 2.6X14	3
54	411 020 7700	SCR S-TPG BRZ 3X6	1
55	411 022 7807	SCR S-TPG PAN 2X6	1
56	411 104 6605	SCR TPG PAN 1.7X10	1

NOTES:

1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

P.C.BOARD PARTS LIST

Ref. No.	Part No.	Description	Q'ty
ASSY,PCB,CD MAIN,M90			
51	620 207 8755	Assy,PCB,CD Main,M90	1
	411 020 8004	SCR S-TPG BRZ 3X8	1
	620 053 7247	Plate Heat Sink	1
CN51	620 020 5801	Socket Jumper 5P	1
CN52	620 189 5544	Socket Jumper 6P	1
CN53	620 021 8337	Plug 6P	1
CN54	620 021 8610	Plug 6P	1
CN55	620 021 8139	Plug 9P	1
CP56	620 207 9103	Connector-P,TYC-B15P-A1	1
CP57	620 207 9103	Connector-P,TYC-B15P-A1	1
P53	620 204 9335	Potentiometer,100KB,TP	1
P54	620 207 9127	Potentiometer,22KB,TP	1
P55	620 207 9127	Potentiometer,22KB,TP	1
P56	620 204 9335	Potentiometer,100KB,TP	1
TP51	620 021 5589	Plug 5P	1
TP52	620 021 3950	Plug 6P	1
TP53	620 021 4377	Plug 7P	1
TP54	620 021 4346	Plug 4P	1
T51	620 028 8699	OSC Coil	1
or	620 028 8774	OSC Coil	1
X51	620 200 8967	Resonator,Xtal,17.2872MHz	1
IC51	409 124 6507	IC LA9200NM	1
IC52	409 202 5804	IC LC7860K	1
IC53	409 123 7109	IC LC3517BS-15	1
IC54	409 018 5500	IC LA6510	1
IC55	409 018 5500	IC LA6510	1
IC56	409 169 7804	IC NJM78M05FA	1
IC57	409 040 1105	IC NJM79L05A	1
IC58	409 206 9006	IC LC97000P-288	1
IC59	409 057 4403	IC UPC4570C	1
or	409 018 5203	IC LA6462D	1
or	409 070 4701	IC NJM2068D	1
Q51	405 019 3804	TR 2SC536-G-NP-AA	1
or	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 2807	TR 2SC536-F-SPA-AC	1
or	405 019 3903	TR 2SC536-G-SPA-AC	1
Q52	405 004 5004	TR 2SA608-G-NP-AA	1
or	405 004 4502	TR 2SA608-F-NP-AA	1
or	405 004 4601	TR 2SA608-F-SPA-AC	1
or	405 004 5103	TR 2SA608-G-SPA-AC	1
Q53	405 019 3804	TR 2SC536-G-NP-AA	1
or	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 2807	TR 2SC536-F-SPA-AC	1
or	405 019 3903	TR 2SC536-G-SPA-AC	1
Q54	405 019 3804	TR 2SC536-G-NP-AA	1
or	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 2807	TR 2SC536-F-SPA-AC	1
or	405 019 3903	TR 2SC536-G-SPA-AC	1
Q55	405 021 0600	TR 2SD1012-G-SPA-AC	1
or	405 021 0907	TR 2SD1012-H-SPA-AC	1
Q56	405 018 2600	TR 2SC3400-AC	1
Q57	405 018 2600	TR 2SC3400-AC	1
Q58	405 018 2600	TR 2SC3400-AC	1
Q59	405 004 5004	TR 2SA608-G-NP-AA	1
or	405 004 4502	TR 2SA608-F-NP-AA	1
or	405 004 4601	TR 2SA608-F-SPA-AC	1
or	405 004 5103	TR 2SA608-G-SPA-AC	1
Q60	405 021 0600	TR 2SD1012-G-SPA-AC	1
or	405 021 0907	TR 2SD1012-H-SPA-AC	1
Q61	405 021 0600	TR 2SD1012-G-SPA-AC	1
or	405 021 0907	TR 2SD1012-H-SPA-AC	1
Q62	405 004 5004	TR 2SA608-G-NP-AA	1
or	405 004 4502	TR 2SA608-F-NP-AA	1
or	405 004 4601	TR 2SA608-F-SPA-AC	1
or	405 004 5103	TR 2SA608-G-SPA-AC	1
Q63	405 004 5004	TR 2SA608-G-NP-AA	1
or	405 004 4502	TR 2SA608-F-NP-AA	1
or	405 004 4601	TR 2SA608-F-SPA-AC	1
or	405 004 5103	TR 2SA608-G-SPA-AC	1
Q64	405 019 3804	TR 2SC536-G-NP-AA	1
or	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 2807	TR 2SC536-F-SPA-AC	1
or	405 019 3903	TR 2SC536-G-SPA-AC	1
Q65	405 018 2600	TR 2SC3400-AC	1
Q67	407 000 3503	VARACTOR DI SVC211SP	1
D51	407 005 3805	DIODE DS442-BT	1
D52	407 005 3805	DIODE DS442-BT	1
D53	407 005 3805	DIODE DS442-BT	1
D54	407 005 3805	DIODE DS442-BT	1
D55	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D56	407 005 3805	DIODE DS442-BT	1
D57	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D58	407 005 3805	DIODE DS442-BT	1
D59	407 005 3805	DIODE DS442-BT	1
D60	407 005 3805	DIODE DS442-BT	1
D61	407 005 3805	DIODE DS442-BT	1
D62	407 005 3805	DIODE DS442-BT	1
D63	407 005 3805	DIODE DS442-BT	1
D64	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D65	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D66	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D67	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D68	407 005 3805	DIODE DS442-BT	1
D69	407 005 8602	DIODE ERA15-02	1
D70	407 005 8602	DIODE ERA15-02	1
D71	407 005 8602	DIODE ERA15-02	1
D72	407 005 8602	DIODE ERA15-02	1
D73	407 005 3805	DIODE DS442-BT	1
D74	407 005 3805	DIODE DS442-BT	1
D75	407 005 8602	DIODE ERA15-02	1
D76	407 005 8602	DIODE ERA15-02	1
D77	407 137 0604	ZENER DIODE GZE30B-BT	1
D78	407 136 4108	ZENER DIODE GZE6.2B-BT	1
D79	407 136 2500	ZENER DIODE GZE3.6B-BT	1
D80	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D81	407 005 3805	DIODE DS442-BT	1
D88	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D89	407 005 3805	DIODE DS442-BT	1
C51	403 049 5508	ELECT 10U M 50V	1
C52	403 016 2004	CERAMIC 2.2P K 50V	1
C53	403 009 1809	CERAMIC 10P J 50V	1
C54	403 057 0908	POLYESTER 0.01U K 50V	1
C55	403 048 7701	ELECT 0.47U M 50V	1
C56	403 071 2001	CERAMIC 180P K 50V	1
C57	403 030 6309	CERAMIC 68P J 50V	1
C58	403 030 6309	CERAMIC 68P J 50V	1
C59	403 158 3501	NP-ELECT 0.47U M 50V	1
C60	403 073 7004	CERAMIC 470P K 50V	1
C61	403 044 0300	ELECT 47U M 16V	1
C62	403 073 7004	CERAMIC 470P K 50V	1
C63	403 121 9509	CERAMIC 0.1U Z 50V	1
C64	403 067 8208	MT-COMPO 0.068U J 50V	1
C65	403 121 9509	CERAMIC 0.1U Z 50V	1
C66	403 022 7703	CERAMIC 33P J 50V	1
C67	403 022 7703	CERAMIC 33P J 50V	1
C68	403 001 1906	CERAMIC 0.01U M 16V	1
C69	403 071 6207	CERAMIC 220P K 50V	1
C70	403 067 6204	MT-COMPO 0.15U J 50V	1
C71	403 159 7201	NP-ELECT 1U M 50V	1
C72	403 210 3005	NP-ELECT 0.33U M 50V	1
C73	403 071 6207	CERAMIC 220P K 50V	1
C74	403 025 7304	CERAMIC 4.7P K 50V	1
C75	403 121 9509	CERAMIC 0.1U Z 50V	1
C76	403 038 7209	ELECT 220U M 6.3V	1
C77	403 038 7209	ELECT 220U M 6.3V	1
C78	403 003 8705	CERAMIC 0.039U K 25V	1
C79	403 071 6207	CERAMIC 220P K 50V	1
C80	403 087 2507	STYRENE 1000P J 50V	1
C81	403 057 0908	POLYESTER 0.01U K 50V	1
C82	403 121 9509	CERAMIC 0.1U Z 50V	1
C83	403 149 7105	POLYPRO 680P J 100V	1
C84	403 003 6701	CERAMIC 0.033U K 25V	1
C85	403 121 9509	CERAMIC 0.1U Z 50V	1
C86	403 048 3208	ELECT 0.22U M 50V	1
C87	403 038 2402	ELECT 100U M 6.3V	1
C88	403 001 1906	CERAMIC 0.01U M 16V	1
C89	403 121 9509	CERAMIC 0.1U Z 50V	1
C90	403 121 9509	CERAMIC 0.1U Z 50V	1
C91	403 159 7201	NP-ELECT 1U M 50V	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
C92	403 121 9509	CERAMIC 0.1U Z 50V	1
C93	403 002 6207	CERAMIC 0.012U K 25V	1
C94	403 001 5102	CERAMIC 2200P M 16V	1
C95	403 002 6207	CERAMIC 0.012U K 25V	1
C96	403 001 5102	CERAMIC 2200P M 16V	1
C97	403 159 7201	NP-ELECT 1U M 50V	1
C98	403 159 7201	NP-ELECT 1U M 50V	1
C99	403 050 3708	ELECT 22U M 50V	1
C100	403 050 3708	ELECT 22U M 50V	1
C101	403 121 9509	CERAMIC 0.1U Z 50V	1
C102	403 121 9509	CERAMIC 0.1U Z 50V	1
C103	403 001 1906	CERAMIC 0.01U M 16V	1
C104	403 051 2106	ELECT 4.7U M 50V	1
C105	403 049 5508	ELECT 10U M 50V	1
C106	403 050 1308	ELECT 2.2U M 50V	1
C109	403 003 3700	CERAMIC 0.022U Z 25V	1
C110	403 121 9509	CERAMIC 0.1U Z 50V	1
C111	403 038 7209	ELECT 220U M 6.3V	1
C112	403 121 9509	CERAMIC 0.1U Z 50V	1
C113	403 038 7209	ELECT 220U M 6.3V	1
C114	403 008 5105	CERAMIC 10P D 50V	1
C115	403 008 5105	CERAMIC 10P D 50V	1
C116	403 121 9509	CERAMIC 0.1U Z 50V	1
C117	403 121 9509	CERAMIC 0.1U Z 50V	1
C118	403 210 2909	NP-ELECT 22U M 16V	1
C119	403 210 2909	NP-ELECT 22U M 16V	1
C120	403 073 7004	CERAMIC 470P K 50V	1
C121	403 073 7004	CERAMIC 470P K 50V	1
C122	403 001 1906	CERAMIC 0.01U M 16V	1
C123	403 001 1906	CERAMIC 0.01U M 16V	1
C124	403 044 0300	ELECT 47U M 16V	1
C125	403 044 0300	ELECT 47U M 16V	1
C126	403 049 5508	ELECT 10U M 50V	1
C127	403 001 1906	CERAMIC 0.01U M 16V	1
C128	403 043 3104	ELECT 2200U M 16V	1
C129	403 043 3104	ELECT 2200U M 16V	1
C130	403 072 2703	CERAMIC 0.022U Z 50V	1
C131	403 072 2703	CERAMIC 0.022U Z 50V	1
C132	403 052 8107	ELECT 100U M 35V	1
C133	403 049 7304	ELECT 100U M 50V	1
C134	403 049 5508	ELECT 10U M 50V	1
C135	403 121 9509	CERAMIC 0.1U Z 50V	1
C136	403 121 9509	CERAMIC 0.1U Z 50V	1
C137	403 049 1708	ELECT 1U M 50V	1
C138	403 038 7209	ELECT 220U M 6.3V	1
C139	403 046 4603	ELECT 33U M 25V	1
C140	403 038 7209	ELECT 220U M 6.3V	1
C148	403 049 5508	ELECT 10U M 50V	1
R51	401 012 5708	CARBON 1K JA 1/4W	1
R52	401 026 0003	CARBON 24K JA 1/6W	1
R53	401 024 7400	CARBON 10K JA 1/6W	1
R54	401 024 7400	CARBON 10K JA 1/6W	1
R55	401 021 3009	CARBON 5.6K JA 1/4W	1
R56	401 012 4503	CARBON 100 JA 1/4W	1
R57	401 025 7409	CARBON 220 JA 1/6W	1
R58	401 024 7707	CARBON 100K JA 1/6W	1
R59	401 024 7707	CARBON 100K JA 1/6W	1
R60	401 025 1902	CARBON 15K JA 1/6W	1
R61	401 027 2600	CARBON 5.6K JA 1/6W	1
R63	401 025 8208	CARBON 22K JA 1/6W	1
R64	401 016 5803	CARBON 220K JA 1/4W	1
R65	401 017 3808	CARBON 270K JA 1/4W	1
R66	401 017 3808	CARBON 270K JA 1/4W	1
R67	401 013 7305	CARBON 120K JA 1/4W	1
R68	401 018 4903	CARBON 33K JA 1/4W	1
R69	401 012 4503	CARBON 100 JA 1/4W	1
R70	401 026 4605	CARBON 33K JA 1/6W	1
R71	401 027 0309	CARBON 47K JA 1/6W	1
R72	401 026 4308	CARBON 3.3K JA 1/6W	1
R73	401 027 0309	CARBON 47K JA 1/6W	1
R74	401 026 1604	CARBON 270K JA 1/6W	1
R75	401 027 0309	CARBON 47K JA 1/6W	1
R76	401 025 8208	CARBON 22K JA 1/6W	1
R77	401 024 9305	CARBON 1.2K JA 1/6W	1
R78	401 015 6504	CARBON 2.2 JA 1/4W	1
R79	401 015 6504	CARBON 2.2 JA 1/4W	1
R80	401 025 2305	CARBON 150K JA 1/6W	1
R81	401 024 7707	CARBON 100K JA 1/6W	1
R82	401 025 7805	CARBON 2.2K JA 1/6W	1
R83	401 026 0607	CARBON 270 JA 1/6W	1
R84	401 016 5803	CARBON 220K JA 1/4W	1
R85	401 024 9701	CARBON 12K JA 1/6W	1
R86	401 026 7408	CARBON 39K JA 1/6W	1
R87	401 026 7408	CARBON 39K JA 1/6W	1
R88	401 025 1902	CARBON 15K JA 1/6W	1
R89	401 026 1307	CARBON 27K JA 1/6W	1
R90	401 025 8703	CARBON 220K JA 1/6W	1
R91	401 026 4902	CARBON 330K JA 1/6W	1
R92	401 026 1307	CARBON 27K JA 1/6W	1
R93	401 011 8908	CARBON 1 JA 1/4W	1
R94	401 015 6504	CARBON 2.2 JA 1/4W	1
R95	401 026 9907	CARBON 4.7K JA 1/6W	1
R96	401 026 4308	CARBON 3.3K JA 1/6W	1
R97	401 025 7409	CARBON 220 JA 1/6W	1
R98	401 025 8208	CARBON 22K JA 1/6W	1
R99	401 025 7805	CARBON 2.2K JA 1/6W	1
R100	401 025 1902	CARBON 15K JA 1/6W	1
R101	401 024 7400	CARBON 10K JA 1/6W	1
R102	401 024 7707	CARBON 100K JA 1/6W	1
R103	401 024 7707	CARBON 100K JA 1/6W	1
R104	401 025 8208	CARBON 22K JA 1/6W	1
R105	401 025 8208	CARBON 22K JA 1/6W	1
R106	401 025 8208	CARBON 22K JA 1/6W	1
R107	401 027 5502	CARBON 6.8K JA 1/6W	1
R108	401 025 7805	CARBON 2.2K JA 1/6W	1
R109	401 024 7400	CARBON 10K JA 1/6W	1
R110	401 025 8703	CARBON 220K JA 1/6W	1
R111	401 024 7400	CARBON 10K JA 1/6W	1
R112	401 015 6504	CARBON 2.2 JA 1/4W	1
R113	401 015 6504	CARBON 2.2 JA 1/4W	1
R114	401 024 7707	CARBON 100K JA 1/6W	1
R115	401 026 4605	CARBON 33K JA 1/6W	1
R116	401 025 6709	CARBON 200K JA 1/6W	1
R117	401 017 2801	CARBON 27K JA 1/4W	1
R118	401 024 7707	CARBON 100K JA 1/6W	1
R119	401 026 4605	CARBON 33K JA 1/6W	1
R120	401 028 0308	CARBON 91K JA 1/6W	1
R121	401 017 2801	CARBON 27K JA 1/4W	1
R122	401 020 2904	CARBON 47K JA 1/4W	1
R123	401 025 8208	CARBON 22K JA 1/6W	1
R124	401 025 8208	CARBON 22K JA 1/6W	1
R125	401 027 5502	CARBON 6.8K JA 1/6W	1
R126	401 025 7805	CARBON 2.2K JA 1/6W	1
R127	401 024 7004	CARBON 1K JA 1/6W	1
R128	401 027 0309	CARBON 47K JA 1/6W	1
R129	401 024 7004	CARBON 1K JA 1/6W	1
R130	401 027 5502	CARBON 6.8K JA 1/6W	1
R131	401 027 5502	CARBON 6.8K JA 1/6W	1
R132	401 025 8208	CARBON 22K JA 1/6W	1
R133	401 026 4308	CARBON 3.3K JA 1/6W	1
R134	401 012 5708	CARBON 1K JA 1/4W	1
R135	401 012 5708	CARBON 1K JA 1/4W	1
R136	401 023 1706	CARBON 820 JA 1/4W	1
R137	401 023 1706	CARBON 820 JA 1/4W	1
R138	401 024 8001	CARBON 1M JA 1/6W	1
R139	401 026 9303	CARBON 47 JA 1/6W	1
R140	401 026 1802	CARBON 2.7M JA 1/6W	1
R141	401 026 1802	CARBON 2.7M JA 1/6W	1
R142	401 025 7805	CARBON 2.2K JA 1/6W	1
R143	401 025 7805	CARBON 2.2K JA 1/6W	1
R144	401 026 9907	CARBON 4.7K JA 1/6W	1
R145	401 026 9907	CARBON 4.7K JA 1/6W	1
R146	401 027 5502	CARBON 6.8K JA 1/6W	1
R147	401 027 5502	CARBON 6.8K JA 1/6W	1
R148	401 026 9303	CARBON 47 JA 1/6W	1
R149	401 026 9303	CARBON 47 JA 1/6W	1
R150	401 027 0507	CARBON 470K JA 1/6W	1
R151	401 027 0507	CARBON 470K JA 1/6W	1
R152	402 015 8505	FUSIBLE RES 22 J- 1/4W	1
R153	401 012 5708	CARBON 1K JA 1/4W	1
R154	401 024 6700	CARBON 100 JA 1/6W	1
R155	401 024 6700	CARBON 100 JA 1/6W	1
R156	401 024 7400	CARBON 10K JA 1/6W	1
R157	401 026 9600	CARBON 470 JA 1/6W	1
R158	401 025 8208	CARBON 22K JA 1/6W	1
R159	401 025 8208	CARBON 22K JA 1/6W	1
R160	401 025 7409	CARBON 220 JA 1/6W	1
R161	401 024 6403	CARBON 10 JA 1/6W	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
R162	401 027 0309	CARBON 47K JA 1/6W	1
R163	401 025 8208	CARBON 22K JA 1/6W	1
R164	401 026 4308	CARBON 3.3K JA 1/6W	1
R165	401 016 4806	CARBON 22K JA 1/4W	1
R166	402 016 4506	FUSIBLE RES 10 J- 1/2W	1
R167	402 016 4506	FUSIBLE RES 10 J- 1/2W	1
R172	401 026 1000	CARBON 2.7K JA 1/6W	1
R173	401 026 1000	CARBON 2.7K JA 1/6W	1
R174	401 024 7707	CARBON 100K JA 1/6W	1
R175	401 012 5708	CARBON 1K JA 1/4W	1
R184	401 012 8105	CARBON 100K JA 1/4W	1
R185	401 027 3201	CARBON 560K JA 1/6W	1
R186	401 027 3003	CARBON 56K JA 1/6W	1
R187	401 012 8105	CARBON 100K JA 1/4W	1
R188	401 027 3201	CARBON 560K JA 1/6W	1
R189	401 027 0309	CARBON 47K JA 1/6W	1
R190	401 027 5205	CARBON 680 JA 1/6W	1
R191	401 024 7400	CARBON 10K JA 1/6W	1
R192	401 015 6504	CARBON 2.2 JA 1/4W	1
R193	401 015 6504	CARBON 2.2 JA 1/4W	1
R194	401 012 5708	CARBON 1K JA 1/4W	1
R195	401 027 0309	CARBON 47K JA 1/6W	1
R196	401 027 1603	CARBON 5.1K JA 1/6W	1
R197	401 026 4308	CARBON 3.3K JA 1/6W	1
ASSY,PCB,CD CONTROL,M90			
52	620 207 8762	Assy,PCB,CD Control,M90	1
	620 206 5960	Spacer,FL	1
	620 198 6259	Fluorescent TUBE12BT-26GK	1
CN56	620 196 2536	Connector-S,TYC-B15X-A1	1
CN57	620 196 2536	Connector-S,TYC-B15X-A1	1
RA51	620 190 4062	Resistor 10X10K	1
RA52	620 190 4062	Resistor 10X10K	1
S51	620 202 6725	Switch,Tact (OPEN/CLOSE)	1
S52	620 202 6725	Switch,Tact (STOP)	1
S53	620 202 6725	Switch,Tact (PLAY)	1
S54	620 202 6725	Switch,Tact (PAUSE)	1
S55	620 202 6725	Switch,Tact (F.B)	1
S56	620 202 6725	Switch,Tact (F.F)	1
S57	620 202 6725	Switch,Tact (IND/FB)	1
S58	620 202 6725	Switch,Tact (IND/FF)	1
S59	620 202 6725	Switch,Tact (MEMORY)	1
S62	620 202 6725	Switch,Tact (REPEAT)	1
S63	620 202 6725	Switch,Tact (TIME)	1
S64	620 202 6725	Switch,Tact (EDIT)	1
S65	620 202 6725	Switch,Tact (SIDE A/B)	1
S66	620 202 6725	Switch,Tact (RANDOM)	1
S67	620 202 6725	Switch,Tact (INTRO)	1
X52	620 189 5117	Ceramic OSC 6MHz	1
IC60	409 203 8507	IC M50954-125SP	1
Q68	405 018 2600	TR 2SC3400-AC	1
Q74	405 003 7702	TR 2SA1346-AC	1
D82	407 005 3805	DIODE DS442-BT	1
D83	407 005 3805	DIODE DS442-BT	1
D84	407 005 3805	DIODE DS442-BT	1
D85	407 005 3805	DIODE DS442-BT	1
C142	403 039 6409	ELECT 10U M 10V	1
C144	403 121 9509	CERAMIC 0.1U Z 50V	1
C145	403 121 9509	CERAMIC 0.1U Z 50V	1
C146	403 121 9509	CERAMIC 0.1U Z 50V	1
C147	403 121 9509	CERAMIC 0.1U Z 50V	1
R176	401 012 8105	CARBON 100K JA 1/4W	1
R177	401 012 8105	CARBON 100K JA 1/4W	1
R178	401 012 8105	CARBON 100K JA 1/4W	1
R179	401 012 8105	CARBON 100K JA 1/4W	1
R180	401 024 8001	CARBON 1M JA 1/6W	1
ASSY,PCB,MAIN			
53	620 207 8892	Assy,PCB,Main	1
	620 182 8788	Pin Jack 4P ALL BK	1
	620 190 2242	Jack 7P Black	1
	620 021 6821	Pin 1P	8
	620 022 3492	Terminal Lug	1
	620 186 9170	Push Terminal 4P	1
	411 020 7700	SCR S-TPG BRZ 3X6	3
	620 208 9546	Shield,Cover,Bottom	1
	620 208 9553	Shield,Cover	1
	620 207 9646	Jack,Connector 1P	1
	620 207 9158	Fuse Holder,Taping	4
	620 050 2450	Metal Mount Antenna	2
	620 052 9082	Cover Shield Top	1
	620 118 2125	Plate Shield	1
	620 053 9012	Plate Heat Sink	1
	620 053 8848	Plate Heat Sink	1
BF300	620 191 6607	FTZ Antenna Filter	1
CF300	620 207 9622	Filter,10.7MHz	1
or	620 014 5664	Ceramic Filter	1
CF301	620 207 9622	Filter,10.7MHz	1
or	620 014 5664	Ceramic Filter	1
CF302	620 014 6319	Ceramic OSC CSB456F11	1
CN300	620 022 0545	Plug 2P	1
CN301	620 182 8955	Plug 3P	1
CN302	620 182 8948	Plug 6P	1
CN303	620 022 0545	Plug 2P	1
CN304	620 182 9037	Plug 9P	1
CN305	620 182 9020	Plug 8P	1
CN306	620 182 8955	Plug 3P	1
CN307	620 021 6548	Plug 2P	1
CN350	620 020 5801	Socket Jumper 5P	1
CN360	620 189 5551	Socket Jumper 7P	1
F300 ⚠	423 006 4702	FUSE 250V T2.5A	1
F301 ⚠	423 006 4702	FUSE 250V T2.5A	1
HL352	620 200 2583	Socket,Holder,6P	1
IC312	620 017 0734	Protector ICP-5	1
JM352	620 207 9479	Wire,6P	1
L300	620 207 9370	Coil,AIR,0.11UH,ANT-1	1
L301	620 207 9387	Coil,AIR,0.06UH,ANT-2	1
L302	620 207 9394	Coil,AIR,0.16UH,ANT-3	1
L303	620 207 9400	Coil,AIR,0.1UH,RFA-1	1
L304	620 207 9417	Coil,AIR,0.05UH,RFA-2	1
L305	620 207 9424	Coil,AIR,0.24UH,RFA-3	1
L306	620 207 9431	Coil,AIR,0.05UH,RFB-1	1
L307	620 207 9448	Coil,AIR,0.16UH,RFB-2	1
L308	620 202 0112	Inductor 2.2UH K	1
L309	620 207 9455	Coil,AIR,0.19UH,OSC	1
L310	620 026 5478	RF Filter	1
or	620 026 5447	RF Filter	1
L311	620 026 5478	RF Filter	1
or	620 026 5447	RF Filter	1
PL300	620 205 5978	Connector-P,10P,53114	1
PL301	620 205 5961	Connector-P,9P,53114	1
PL302	620 205 5978	Connector-P,10P,53114	1
P300	620 204 9335	Potentiometer,100KB,TP	1
P301	620 202 2079	Potentiometer,10KB,TP	1
P302	620 202 3830	Potentiometer,220B,TP	1
P303	620 202 3830	Potentiometer,220B,TP	1
P304	620 204 9335	Potentiometer,100KB,TP	1
P305	620 204 9335	Potentiometer,100KB,TP	1
P306	620 202 2109	Potentiometer,2.2KB,TP	1
P307	620 202 2109	Potentiometer,2.2KB,TP	1
P308	620 204 9335	Potentiometer,100KB,TP	1
P309	620 005 6786	Potentiometer,200KB,TP	1
TC300	620 189 9108	Trimmer 20PF	1
TC301	620 189 9108	Trimmer 20PF	1
TM300	620 202 8033	Terminal,I-102NA,2P	1
TM301	620 207 0728	Terminal,Wrapper,3P,I-503	1
T300	620 027 6665	FM IFT	1
T301	620 192 7467	MW Antenna Coil	1
or	620 028 1348	MW Antenna Coil	1
T302	620 028 2901	LW Antenna Coil	1
or	620 028 1362	LW Antenna Coil	1
T303	620 192 7474	OSC Coil MW	1
T304	620 192 7481	OSC Coil LW	1
T305	620 207 9660	Trans,IF,450kHz	1
T306	620 189 6008	IFT DET 10.7MHz 1st K	1
T307	620 189 6015	IFT DET 10.7MHz 2nd K	1
T308	620 207 9653	Coil,Ferrite,Anti Birdie	1
T309	620 026 4754	Low Pass Filter	1
T310	620 026 4754	Low Pass Filter	1
T311	620 191 6058	Bias OSC Coil	1
or	620 028 8989	Bias OSC Coil	1
T312	620 201 3855	Inductor,Ferrite,105K	1
or	620 026 4648	Bias Trap 2700 Shield	1
T313	620 201 3855	Inductor,Ferrite,105K	1
or	620 026 4648	Bias Trap 2700 Shield	1
T314	620 207 9639	Inductor,Ferrite,6.8/3.3M	1
T315	620 207 9639	Inductor,Ferrite,6.8/3.3M	1
T316	620 200 1494	Coil,Ferrite,Dolby	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
T317	620 200 1494	Coil,Ferrite,Dolby	1
T318	620 201 3855	Inductor,Ferrite,105K	1
T319	620 201 3855	Inductor,Ferrite,105K	1
IC300	409 073 9505	IC LA1266	1
IC301	409 017 1008	IC LA3401	1
IC302	409 121 8702	IC LA3246	1
IC303	409 145 8405	IC UPC1330HA	1
IC304	409 199 1209	IC HA12136A	1
IC305	409 018 4503	IC LA6458DS	1
IC306	409 109 5105	IC LC7821	1
IC307	409 215 0704	IC GD4001B	1
or	409 207 1108	IC MLC4001B	1
IC308	409 102 0206	IC STK4142MK2	1
IC309	409 178 4207	IC NJM79M15FA	1
IC310	409 078 1504	IC L78M15ML	1
or	409 178 4108	IC NJM78M15FA	1
IC311	409 074 0808	IC LA5667	1
Q300	405 028 5202	TR 3SK73-GR	1
Q301	405 016 5900	TR 2SC2999-E-SPA-AC	1
or	405 016 5702	TR 2SC2999-D-SPA-AC	1
Q302	405 016 5900	TR 2SC2999-E-SPA-AC	1
or	405 016 5702	TR 2SC2999-D-SPA-AC	1
Q303	405 035 8708	TR 2SK544-E-AC	1
or	405 035 8609	TR 2SK544-F-AC	1
Q304	405 035 8708	TR 2SK544-E-AC	1
or	405 035 8609	TR 2SK544-F-AC	1
Q305	405 016 1100	TR 2SC2839-F-SPA-AC	1
or	405 016 0905	TR 2SC2839-E-SPA-AC	1
Q306	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 3804	TR 2SC536-G-NP-AA	1
Q307	405 027 0505	TR 2SK246-GR (TPE2)	1
or	405 027 0604	TR 2SK246-Y-TPE2	1
Q308	405 021 0600	TR 2SD1012-G-SPA-AC	1
or	405 021 0907	TR 2SD1012-H-SPA-AC	1
Q309	405 018 2600	TR 2SC3400-AC	1
Q310	405 018 2808	TR 2SC3402-AC	1
Q311	405 018 2808	TR 2SC3402-AC	1
Q312	405 003 7603	TR 2SA1345-AC	1
Q313	405 018 2600	TR 2SC3400-AC	1
Q314	405 003 7702	TR 2SA1346-AC	1
Q315	405 018 2600	TR 2SC3400-AC	1
Q316	405 018 2501	TR 2SC3399-AC	1
Q317	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 3804	TR 2SC536-G-NP-AA	1
Q318	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 3804	TR 2SC536-G-NP-AA	1
Q319	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 3804	TR 2SC536-G-NP-AA	1
Q320	405 018 2600	TR 2SC3400-AC	1
Q321	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 3804	TR 2SC536-G-NP-AA	1
Q322	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 3804	TR 2SC536-G-NP-AA	1
Q323	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 3804	TR 2SC536-G-NP-AA	1
Q324	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 3804	TR 2SC536-G-NP-AA	1
Q325	405 018 0101	TR 2SC3331-T-AA	1
or	405 018 0200	TR 2SC3331-U-AA	1
Q326	405 018 0101	TR 2SC3331-T-AA	1
or	405 018 0200	TR 2SC3331-U-AA	1
Q327	405 018 2600	TR 2SC3400-AC	1
Q328	405 018 2600	TR 2SC3400-AC	1
Q329	405 018 2600	TR 2SC3400-AC	1
Q330	405 018 2600	TR 2SC3400-AC	1
Q331	405 018 2600	TR 2SC3400-AC	1
Q332	405 018 2600	TR 2SC3400-AC	1
Q333	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 3804	TR 2SC536-G-NP-AA	1
Q334	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 3804	TR 2SC536-G-NP-AA	1
Q335	405 018 2600	TR 2SC3400-AC	1
Q336	405 018 2600	TR 2SC3400-AC	1
Q337	405 003 7702	TR 2SA1346-AC	1
Q338	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 3804	TR 2SC536-G-NP-AA	1
Q339	405 003 7702	TR 2SA1346-AC	1
Q340	405 003 7702	TR 2SA1346-AC	1
Q341	405 018 2600	TR 2SC3400-AC	1
Q342	405 018 2600	TR 2SC3400-AC	1
Q343	405 018 2600	TR 2SC3400-AC	1
Q344	405 018 2600	TR 2SC3400-AC	1
Q345	405 018 2600	TR 2SC3400-AC	1
Q346	405 018 2600	TR 2SC3400-AC	1
Q347	405 008 6809	TR 2SB808-F-SPA-AC	1
or	405 008 7103	TR 2SB808-G-SPA-AC	1
Q348	405 018 2600	TR 2SC3400-AC	1
Q349	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 3804	TR 2SC536-G-NP-AA	1
Q350	405 021 0600	TR 2SD1012-G-SPA-AC	1
or	405 021 0907	TR 2SD1012-H-SPA-AC	1
Q351	405 018 7209	TR 2SC3708-S	1
or	405 018 7308	TR 2SC3708-T	1
Q352	405 018 2600	TR 2SC3400-AC	1
Q353	405 003 7702	TR 2SA1346-AC	1
Q354	405 018 2600	TR 2SC3400-AC	1
Q355	405 018 2600	TR 2SC3400-AC	1
Q356	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 3804	TR 2SC536-G-NP-AA	1
Q357	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 3804	TR 2SC536-G-NP-AA	1
Q358	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 3804	TR 2SC536-G-NP-AA	1
Q359	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 3804	TR 2SC536-G-NP-AA	1
Q360	405 021 0600	TR 2SD1012-G-SPA-AC	1
or	405 021 0907	TR 2SD1012-H-SPA-AC	1
Q361	405 021 0600	TR 2SD1012-G-SPA-AC	1
or	405 021 0907	TR 2SD1012-H-SPA-AC	1
Q362	405 018 2600	TR 2SC3400-AC	1
Q363	405 003 7702	TR 2SA1346-AC	1
Q364	405 035 7107	TR 2SD1913-R	1
or	405 035 7206	TR 2SD1913-S	1
or	405 022 4904	TR 2SD1406-GR	1
or	405 022 5000	TR 2SD1406-Y	1
or	405 022 7004	TR 2SD1666-R	1
or	405 022 7202	TR 2SD1666-S	1
Q365	405 035 7107	TR 2SD1913-R	1
or	405 035 7206	TR 2SD1913-S	1
or	405 022 4904	TR 2SD1406-GR	1
or	405 022 5000	TR 2SD1406-Y	1
or	405 022 7004	TR 2SD1666-R	1
or	405 022 7202	TR 2SD1666-S	1
Q366	405 018 0101	TR 2SC3331-T-AA	1
or	405 018 0200	TR 2SC3331-U-AA	1
Q367	405 018 0101	TR 2SC3331-T-AA	1
or	405 018 0200	TR 2SC3331-U-AA	1
Q368	405 021 0600	TR 2SD1012-G-SPA-AC	1
or	405 021 0907	TR 2SD1012-H-SPA-AC	1
Q369	405 021 0600	TR 2SD1012-G-SPA-AC	1
or	405 021 0907	TR 2SD1012-H-SPA-AC	1
Q370	405 003 7702	TR 2SA1346-AC	1
Q371	405 019 2807	TR 2SC536-F-SPA-AC	1
or	405 019 3903	TR 2SC536-G-SPA-AC	1
or	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 3804	TR 2SC536-G-NP-AA	1
D300	407 137 7207	DIODE 1SV110A	1
D301	407 137 7207	DIODE 1SV110A	1
D302	407 137 7207	DIODE 1SV110A	1
D303	407 137 7207	DIODE 1SV110A	1
D304	407 000 4708	VARACTOR DI SVC321C-2	1
or	407 000 4807	VARACTOR DI SVC321D-2	1
D305	407 000 4708	VARACTOR DI SVC321C-2	1
or	407 000 4807	VARACTOR DI SVC321D-2	1
D306	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D307	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D308	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D309	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D310	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D311	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D312	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
D313	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D314	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D315	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D316	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D317	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D318	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D319	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D320	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D321	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D322	407 005 3805	DIODE DS442-BT	1
D323	407 005 3805	DIODE DS442-BT	1
D324	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D325	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D326	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D327	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D328	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D329	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D330	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D331	407 005 3805	DIODE DS442-BT	1
D332	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D333	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D334	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D335	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D336	407 049 6305	ZENER DIODE GZA12Y-BT	1
D337	407 049 6602	ZENER DIODE GZA13Y-BT	1
D338	407 004 9105	DIODE DSF10C-BT	1
or	407 096 5504	DIODE RL1N4003-E	1
D339	407 004 9105	DIODE DSF10C-BT	1
or	407 096 5504	DIODE RL1N4003-E	1
D340	407 004 9105	DIODE DSF10C-BT	1
or	407 096 5504	DIODE RL1N4003-E	1
D341	407 004 9105	DIODE DSF10C-BT	1
or	407 096 5504	DIODE RL1N4003-E	1
D342	407 003 7300	DIODE DBA30C-K12	1
D343	407 008 0415	DIODE GMB01-BT	1
or	407 125 8229	DIODE HSS271	1
C300	403 068 9402	CERAMIC 100P K 50V	1
C301	403 025 7205	CERAMIC 4.7P K 50V	1
C302	403 069 1207	CERAMIC 1000P K 50V	1
C303	403 069 1207	CERAMIC 1000P K 50V	1
C304	403 001 1906	CERAMIC 0.01U M 16V	1
C305	403 021 7209	CERAMIC 3.3P K 50V	1
C306	403 070 4105	CERAMIC 120P K 50V	1
C307	403 069 1207	CERAMIC 1000P K 50V	1
C308	403 068 9402	CERAMIC 100P K 50V	1
C309	403 001 1906	CERAMIC 0.01U M 16V	1
C310	403 014 2501	CERAMIC 18P J 50V	1
C311	403 010 7708	CERAMIC 12P J 50V	1
C312	403 030 2004	CERAMIC 6.8P K 50V	1
C313	403 069 8404	CERAMIC 0.01U Z 50V	1
C314	403 001 1906	CERAMIC 0.01U M 16V	1
C315	403 001 1906	CERAMIC 0.01U M 16V	1
C316	403 069 1207	CERAMIC 1000P K 50V	1
C317	403 021 7209	CERAMIC 3.3P K 50V	1
C318	403 010 7708	CERAMIC 12P J 50V	1
C319	403 012 5900	CERAMIC 15P J 50V	1
C320	403 010 7708	CERAMIC 12P J 50V	1
C321	403 009 8402	CERAMIC 100P K 50V	1
C322	403 007 0804	CERAMIC 1P M 50V	1

Ref. No.	Part No.	Description	Q'ty
C323	403 074 2701	CERAMIC 0.047U Z 50V	1
C324	403 069 8404	CERAMIC 0.01U Z 50V	1
C325	403 069 8404	CERAMIC 0.01U Z 50V	1
C326	403 049 5508	ELECT 10U M 50V	1
C327	403 026 2209	CERAMIC 47P J 50V	1
C328	403 009 1700	CERAMIC 10P J 50V	1
C329	403 050 1308	ELECT 2.2U M 50V	1
C330	403 069 8404	CERAMIC 0.01U Z 50V	1
C331	403 026 2209	CERAMIC 47P J 50V	1
C332	403 074 2701	CERAMIC 0.047U Z 50V	1
C333	403 074 2701	CERAMIC 0.047U Z 50V	1
C334	403 074 2701	CERAMIC 0.047U Z 50V	1
C335	403 074 2701	CERAMIC 0.047U Z 50V	1
C336	403 031 0306	CERAMIC 68P K 50V	1
C337	403 014 2501	CERAMIC 18P J 50V	1
C338	403 088 4104	STYRENE 430P J 50V	1
C339	403 074 2701	CERAMIC 0.047U Z 50V	1
C340	403 069 8404	CERAMIC 0.01U Z 50V	1
C341	403 088 1103	STYRENE 330P J 50V	1
C342	403 069 8404	CERAMIC 0.01U Z 50V	1
C343	403 001 1906	CERAMIC 0.01U M 16V	1
C344	403 038 2402	ELECT 100U M 6.3V	1
C345	403 051 2106	ELECT 4.7U M 50V	1
C346	403 050 7805	ELECT 3.3U M 50V	1
C347	403 069 8404	CERAMIC 0.01U Z 50V	1
C348	403 001 1906	CERAMIC 0.01U M 16V	1
C349	403 049 1708	ELECT 1U M 50V	1
C350	403 051 2106	ELECT 4.7U M 50V	1
C351	403 031 8104	CERAMIC 7P D 50V	1
C352	403 049 5508	ELECT 10U M 50V	1
C353	403 069 8404	CERAMIC 0.01U Z 50V	1
C354	403 050 1308	ELECT 2.2U M 50V	1
C355	403 074 2701	CERAMIC 0.047U Z 50V	1
C356	403 074 2701	CERAMIC 0.047U Z 50V	1
C357	403 069 8404	CERAMIC 0.01U Z 50V	1
C358	403 044 0300	ELECT 47U M 16V	1
C359	403 069 8404	CERAMIC 0.01U Z 50V	1
C360	403 069 8404	CERAMIC 0.01U Z 50V	1
C361	403 074 2701	CERAMIC 0.047U Z 50V	1
C362	403 069 8404	CERAMIC 0.01U Z 50V	1
C363	403 061 3704	POLYESTER 0.039U J 50V	1
C364	403 062 9309	POLYESTER 6800P J 50V	1
C365	403 074 6303	CERAMIC 560P K 50V	1
C366	403 044 0300	ELECT 47U M 16V	1
C368	403 056 8608	POLYESTER 1000P K 50V	1
C369	403 062 0504	POLYESTER 0.047U K 50V	1
C370	403 044 0300	ELECT 47U M 16V	1
C371	403 048 7701	ELECT 0.47U M 50V	1
C372	403 049 1708	ELECT 1U M 50V	1
C373	403 050 1308	ELECT 2.2U M 50V	1
C374	403 069 8404	CERAMIC 0.01U Z 50V	1
C375	403 049 5508	ELECT 10U M 50V	1
C376	403 024 6902	CERAMIC 390P J 50V	1
C377	403 024 6902	CERAMIC 390P J 50V	1
C378	403 050 1308	ELECT 2.2U M 50V	1
C379	403 050 1308	ELECT 2.2U M 50V	1
C380	403 061 7504	POLYESTER 4700P J 50V	1
C381	403 061 7504	POLYESTER 4700P J 50V	1
C382	403 074 9205	CERAMIC 680P K 50V	1
C383	403 074 9205	CERAMIC 680P K 50V	1
C384	403 071 6207	CERAMIC 220P K 50V	1
C385	403 071 6207	CERAMIC 220P K 50V	1
C386	403 051 2106	ELECT 4.7U M 50V	1
C387	403 051 2106	ELECT 4.7U M 50V	1
C388	403 075 4506	CERAMIC 820P K 50V	1
C389	403 075 4506	CERAMIC 820P K 50V	1
C390	403 051 2106	ELECT 4.7U M 50V	1
C391	403 051 2106	ELECT 4.7U M 50V	1
C392	403 044 0300	ELECT 47U M 16V	1
C393	403 044 0300	ELECT 47U M 16V	1
C394	403 056 9704	POLYESTER 0.01U J 50V	1
C395	403 056 9704	POLYESTER 0.01U J 50V	1
C396	403 060 1701	POLYESTER 0.027U J 50V	1
C397	403 060 1701	POLYESTER 0.027U J 50V	1
C398	403 049 5508	ELECT 10U M 50V	1
C399	403 049 5508	ELECT 10U M 50V	1
C400	403 042 3600	ELECT 100U M 16V	1
C401	403 042 3600	ELECT 100U M 16V	1
C402	403 050 1308	ELECT 2.2U M 50V	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
C403	403 050 1308	ELECT 2.2U M 50V	1
C404	403 050 1308	ELECT 2.2U M 50V	1
C405	403 050 3708	ELECT 22U M 50V	1
C406	403 072 8200	CERAMIC 330P K 50V	1
C407	403 072 8200	CERAMIC 330P K 50V	1
C408	403 051 2106	ELECT 4.7U M 50V	1
C409	403 051 2106	ELECT 4.7U M 50V	1
C410	403 051 2106	ELECT 4.7U M 50V	1
C411	403 051 2106	ELECT 4.7U M 50V	1
C412	403 051 2106	ELECT 4.7U M 50V	1
C413	403 051 2106	ELECT 4.7U M 50V	1
C414	403 051 2106	ELECT 4.7U M 50V	1
C415	403 051 2106	ELECT 4.7U M 50V	1
C416	403 067 6709	MT-COMPO 0.22U J 50V	1
C417	403 067 6709	MT-COMPO 0.22U J 50V	1
C418	403 049 1708	ELECT 1U M 50V	1
C419	403 042 3600	ELECT 100U M 16V	1
C420	403 049 5508	ELECT 10U M 50V	1
C421	403 039 7901	ELECT 100U M 10V	1
C422	403 049 1708	ELECT 1U M 50V	1
C423	403 049 1708	ELECT 1U M 50V	1
C424	403 048 7701	ELECT 0.47U M 50V	1
C425	403 048 7701	ELECT 0.47U M 50V	1
C426	403 049 5508	ELECT 10U M 50V	1
C427	403 049 5508	ELECT 10U M 50V	1
C428	403 060 1701	POLYESTER 0.027U J 50V	1
C429	403 060 1701	POLYESTER 0.027U J 50V	1
C430	403 056 9704	POLYESTER 0.01U J 50V	1
C431	403 056 9704	POLYESTER 0.01U J 50V	1
C432	403 058 2604	POLYESTER 0.015U J 50V	1
C433	403 058 2604	POLYESTER 0.015U J 50V	1
C434	403 049 1708	ELECT 1U M 50V	1
C435	403 049 1708	ELECT 1U M 50V	1
C436	403 073 7004	CERAMIC 470P K 50V	1
C437	403 073 7004	CERAMIC 470P K 50V	1
C438	403 044 0300	ELECT 47U M 16V	1
C439	403 051 2106	ELECT 4.7U M 50V	1
C440	403 097 6601	ELECT 33U M 50V	1
C441	403 042 3600	ELECT 100U M 16V	1
C442	403 050 7805	ELECT 3.3U M 50V	1
C443	403 049 1708	ELECT 1U M 50V	1
C444	403 049 1708	ELECT 1U M 50V	1
C445	403 049 1708	ELECT 1U M 50V	1
C446	403 048 7701	ELECT 0.47U M 50V	1
C447	403 069 8404	CERAMIC 0.01U Z 50V	1
C448	403 049 5508	ELECT 10U M 50V	1
C449	403 056 9704	POLYESTER 0.01U J 50V	1
C450	403 059 5208	POLYESTER 0.022U J 50V	1
C451	403 051 2106	ELECT 4.7U M 50V	1
C452	403 068 9402	CERAMIC 100P K 50V	1
C453	403 068 9402	CERAMIC 100P K 50V	1
C454	403 080 8308	POLYPRO 0.012U J 100V	1
C455	403 049 5508	ELECT 10U M 50V	1
C456	403 050 1308	ELECT 2.2U M 50V	1
C457	403 018 8509	CERAMIC 220P K 50V	1
C458	403 018 8509	CERAMIC 220P K 50V	1
C459	403 051 2106	ELECT 4.7U M 50V	1
C460	403 051 2106	ELECT 4.7U M 50V	1
C461	403 073 7004	CERAMIC 470P K 50V	1
C462	403 073 7004	CERAMIC 470P K 50V	1
C463	403 018 8509	CERAMIC 220P K 50V	1
C464	403 018 8509	CERAMIC 220P K 50V	1
C465	403 018 8509	CERAMIC 220P K 50V	1
C466	403 018 8509	CERAMIC 220P K 50V	1
C467	403 044 0300	ELECT 47U M 16V	1
C468	403 044 0300	ELECT 47U M 16V	1
C469	403 058 9603	POLYESTER 0.018U J 50V	1
C470	403 058 9603	POLYESTER 0.018U J 50V	1
C471	403 061 7801	POLYESTER 4700P J 50V	1
C472	403 061 7801	POLYESTER 4700P J 50V	1
C473	403 049 1708	ELECT 1U M 50V	1
C474	403 049 1708	ELECT 1U M 50V	1
C475	403 044 0300	ELECT 47U M 16V	1
C476	403 044 0300	ELECT 47U M 16V	1
C477	403 072 2703	CERAMIC 0.022U Z 50V	1
C478	403 072 2703	CERAMIC 0.022U Z 50V	1
C479	403 051 2106	ELECT 4.7U M 50V	1
C480	403 051 2106	ELECT 4.7U M 50V	1
C481	403 049 1708	ELECT 1U M 50V	1
C482	403 048 7701	ELECT 0.47U M 50V	1
C483	403 048 7701	ELECT 0.47U M 50V	1
C484	403 050 3708	ELECT 22U M 50V	1
C485	403 050 3708	ELECT 22U M 50V	1
C486	403 044 0300	ELECT 47U M 16V	1
C487	403 051 2304	ELECT 4.7U M 50V	1
C488	403 051 2304	ELECT 4.7U M 50V	1
C489	403 073 7004	CERAMIC 470P K 50V	1
C490	403 073 7004	CERAMIC 470P K 50V	1
C491	403 018 8509	CERAMIC 220P K 50V	1
C492	403 018 8509	CERAMIC 220P K 50V	1
C493	403 039 7901	ELECT 100U M 10V	1
C494	403 039 7901	ELECT 100U M 10V	1
C495	403 051 3905	ELECT 47U M 50V	1
C496	403 051 3905	ELECT 47U M 50V	1
C497	403 001 1906	CERAMIC 0.01U M 16V	1
C498	403 001 1906	CERAMIC 0.01U M 16V	1
C499	403 097 6700	ELECT 330U M 50V	1
C500	403 049 7304	ELECT 100U M 50V	1
C501	403 049 5508	ELECT 10U M 50V	1
C502	403 049 5508	ELECT 10U M 50V	1
C503	403 057 3602	POLYESTER 0.1U K 50V	1
C504	403 057 3602	POLYESTER 0.1U K 50V	1
C505	403 018 8509	CERAMIC 220P K 50V	1
C506	403 018 8509	CERAMIC 220P K 50V	1
C507	403 069 1207	CERAMIC 1000P K 50V	1
C508	403 069 1207	CERAMIC 1000P K 50V	1
C509	403 069 8404	CERAMIC 0.01U Z 50V	1
C510	403 069 8404	CERAMIC 0.01U Z 50V	1
C511	403 085 4206	NP-ELECT 10U M 16V	1
C512	403 043 1100	ELECT 220U M 16V	1
C513	403 049 5508	ELECT 10U M 50V	1
C514	403 049 5508	ELECT 10U M 50V	1
C515	403 121 9509	CERAMIC 0.1U Z 50V	1
C516	403 121 9509	CERAMIC 0.1U Z 50V	1
C517	404 012 5501	ELECT 2200U M 40V	1
C518	404 012 5501	ELECT 2200U M 40V	1
C519	404 012 7000	CERAMIC 0.01U P 500V	1
C520	404 012 7000	CERAMIC 0.01U P 500V	1
C521	403 046 0605	ELECT 2200U M 25V	1
C522	403 044 0300	ELECT 47U M 16V	1
C523	403 042 3600	ELECT 100U M 16V	1
C524	403 044 0300	ELECT 47U M 16V	1
C525	403 042 3600	ELECT 100U M 16V	1
C526	403 050 3708	ELECT 22U M 50V	1
C527	403 050 3708	ELECT 22U M 50V	1
C528	403 049 1708	ELECT 1U M 50V	1
C529	403 074 2701	CERAMIC 0.047U Z 50V	1
C530	403 051 2106	ELECT 4.7U M 50V	1
C531	403 051 2106	ELECT 4.7U M 50V	1
C532	403 068 9402	CERAMIC 100P K 50V	1
C533	403 068 9402	CERAMIC 100P K 50V	1
C534	403 049 5508	ELECT 10U M 50V	1
C535	403 049 5508	ELECT 10U M 50V	1
C536	403 060 0001	POLYESTER 2700P J 50V	1
C537	403 060 0001	POLYESTER 2700P J 50V	1
C538	403 042 3600	ELECT 100U M 16V	1
C539	403 069 8404	CERAMIC 0.01U Z 50V	1
C540	403 069 8404	CERAMIC 0.01U Z 50V	1
C541	403 069 8404	CERAMIC 0.01U Z 50V	1
C542	403 069 8404	CERAMIC 0.01U Z 50V	1
C543	403 069 8404	CERAMIC 0.01U Z 50V	1
C544	403 069 8404	CERAMIC 0.01U Z 50V	1
C545	403 069 8404	CERAMIC 0.01U Z 50V	1
C546	403 073 7004	CERAMIC 470P K 50V	1
C547	403 073 7004	CERAMIC 470P K 50V	1
C548	403 018 8509	CERAMIC 220P K 50V	1
C549	403 018 8509	CERAMIC 220P K 50V	1
C550	403 022 7703	CERAMIC 33P J 50V	1
C551	403 069 1207	CERAMIC 1000P K 50V	1
C552	403 026 2209	CERAMIC 47P J 50V	1
C553	403 069 1207	CERAMIC 1000P K 50V	1
C554	403 069 4000	CERAMIC 1000P Z 50V	1
C555	403 069 8404	CERAMIC 0.01U Z 50V	1
C556	403 001 1906	CERAMIC 0.01U M 16V	1
R300	401 024 7707	CARBON 100K JA 1/6W	1
R301	401 024 8001	CARBON 1M JA 1/6W	1
R302	401 024 7707	CARBON 100K JA 1/6W	1
R303	401 026 9303	CARBON 47 JA 1/6W	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
R304	401 024 6403	CARBON 10 JA 1/6W	1
R305	401 024 7400	CARBON 10K JA 1/6W	1
R306	401 024 7400	CARBON 10K JA 1/6W	1
R307	401 024 7400	CARBON 10K JA 1/6W	1
R308	401 024 8001	CARBON 1M JA 1/6W	1
R309	401 024 6403	CARBON 10 JA 1/6W	1
R310	401 024 6700	CARBON 100 JA 1/6W	1
R311	401 024 7707	CARBON 100K JA 1/6W	1
R312	401 012 7009	CARBON 10K JA 1/4W	1
R313	401 024 7400	CARBON 10K JA 1/6W	1
R314	401 024 7400	CARBON 10K JA 1/6W	1
R315	401 019 9600	CARBON 47 JA 1/4W	1
R316	401 026 4308	CARBON 3.3K JA 1/6W	1
R317	401 024 7707	CARBON 100K JA 1/6W	1
R318	401 026 9303	CARBON 47 JA 1/6W	1
R319	401 027 2600	CARBON 5.6K JA 1/6W	1
R320	401 027 2600	CARBON 5.6K JA 1/6W	1
R321	401 024 8001	CARBON 1M JA 1/6W	1
R322	401 024 7004	CARBON 1K JA 1/6W	1
R323	401 024 8001	CARBON 1M JA 1/6W	1
R324	401 026 6609	CARBON 390 JA 1/6W	1
R325	401 026 1000	CARBON 2.7K JA 1/6W	1
R326	401 024 7004	CARBON 1K JA 1/6W	1
R327	401 025 7805	CARBON 2.2K JA 1/6W	1
R328	401 024 7400	CARBON 10K JA 1/6W	1
R329	401 025 8208	CARBON 22K JA 1/6W	1
R330	401 012 4503	CARBON 100 JA 1/4W	1
R331	401 024 7707	CARBON 100K JA 1/6W	1
R332	401 024 7707	CARBON 100K JA 1/6W	1
R333	401 026 9907	CARBON 4.7K JA 1/6W	1
R334	401 025 1902	CARBON 15K JA 1/6W	1
R335	401 024 7707	CARBON 100K JA 1/6W	1
R336	401 024 7004	CARBON 1K JA 1/6W	1
R337	401 027 2600	CARBON 5.6K JA 1/6W	1
R338	401 026 9907	CARBON 4.7K JA 1/6W	1
R339	401 019 9204	CARBON 47 JA 1/4W	1
R340	401 026 6609	CARBON 390 JA 1/6W	1
R341	401 025 7805	CARBON 2.2K JA 1/6W	1
R342	401 027 5205	CARBON 680 JA 1/6W	1
R343	401 026 6609	CARBON 390 JA 1/6W	1
R345	401 027 0309	CARBON 47K JA 1/6W	1
R346	401 024 7707	CARBON 100K JA 1/6W	1
R347	401 026 7408	CARBON 39K JA 1/6W	1
R349	401 018 3807	CARBON 3.3K JA 1/4W	1
R350	401 012 5708	CARBON 1K JA 1/4W	1
R351	401 025 8208	CARBON 22K JA 1/6W	1
R352	401 026 9907	CARBON 4.7K JA 1/6W	1
R353	401 025 8208	CARBON 22K JA 1/6W	1
R354	401 025 1605	CARBON 1.5K JA 1/6W	1
R355	401 024 7400	CARBON 10K JA 1/6W	1
R356	401 024 7004	CARBON 1K JA 1/6W	1
R357	401 025 7805	CARBON 2.2K JA 1/6W	1
R358	401 023 0204	CARBON 82 JA 1/4W	1
R359	401 027 5502	CARBON 6.8K JA 1/6W	1
R360	401 026 1000	CARBON 2.7K JA 1/6W	1
R361	401 026 4308	CARBON 3.3K JA 1/6W	1
R362	401 027 5502	CARBON 6.8K JA 1/6W	1
R363	401 025 7805	CARBON 2.2K JA 1/6W	1
R364	401 016 1102	CARBON 22 JA 1/4W	1
R365	401 026 4308	CARBON 3.3K JA 1/6W	1
R366	401 024 7004	CARBON 1K JA 1/6W	1
R367	401 026 7408	CARBON 39K JA 1/6W	1
R368	401 024 7707	CARBON 100K JA 1/6W	1
R369	401 027 0309	CARBON 47K JA 1/6W	1
R370	401 027 0309	CARBON 47K JA 1/6W	1
R371	401 026 4308	CARBON 3.3K JA 1/6W	1
R372	401 024 7400	CARBON 10K JA 1/6W	1
R373	401 025 0905	CARBON 130K JA 1/6W	1
R374	401 025 0905	CARBON 130K JA 1/6W	1
R375	401 025 0004	CARBON 120K JA 1/6W	1
R376	401 025 0004	CARBON 120K JA 1/6W	1
R377	401 026 4308	CARBON 3.3K JA 1/6W	1
R378	401 026 4308	CARBON 3.3K JA 1/6W	1
R379	401 027 2600	CARBON 5.6K JA 1/6W	1
R380	401 027 2600	CARBON 5.6K JA 1/6W	1
R381	401 024 7707	CARBON 100K JA 1/6W	1
R382	401 024 7400	CARBON 10K JA 1/6W	1
R383	401 024 7400	CARBON 10K JA 1/6W	1
R384	401 024 7707	CARBON 100K JA 1/6W	1
R385	401 024 7707	CARBON 100K JA 1/6W	1
R386	401 024 7707	CARBON 100K JA 1/6W	1
R387	401 024 7707	CARBON 100K JA 1/6W	1
R388	401 024 9701	CARBON 12K JA 1/6W	1
R389	401 024 9701	CARBON 12K JA 1/6W	1
R390	401 025 4606	CARBON 18K JA 1/6W	1
R391	401 025 4606	CARBON 18K JA 1/6W	1
R392	401 025 7805	CARBON 2.2K JA 1/6W	1
R393	401 025 7805	CARBON 2.2K JA 1/6W	1
R394	401 026 4308	CARBON 3.3K JA 1/6W	1
R395	401 026 4308	CARBON 3.3K JA 1/6W	1
R396	401 024 7400	CARBON 10K JA 1/6W	1
R397	401 024 7400	CARBON 10K JA 1/6W	1
R398	401 016 2604	CARBON 220 JA 1/4W	1
R399	401 022 4104	CARBON 68K JA 1/4W	1
R400	401 027 0507	CARBON 470K JA 1/6W	1
R401	401 022 4104	CARBON 68K JA 1/4W	1
R402	401 027 0507	CARBON 470K JA 1/6W	1
R403	401 027 0507	CARBON 470K JA 1/6W	1
R404	401 027 5908	CARBON 68K JA 1/6W	1
R405	401 024 7400	CARBON 10K JA 1/6W	1
R406	401 015 1608	CARBON 180 JA 1/4W	1
R407	401 025 8208	CARBON 22K JA 1/6W	1
R408	401 026 2403	CARBON 3.9 JA 1/6W	1
R409	401 026 9303	CARBON 47 JA 1/6W	1
R410	401 024 7400	CARBON 10K JA 1/6W	1
R411	401 016 2604	CARBON 220 JA 1/4W	1
R412	401 017 0807	CARBON 270 JA 1/4W	1
R413	401 027 5502	CARBON 6.8K JA 1/6W	1
R414	401 027 5502	CARBON 6.8K JA 1/6W	1
R415	401 012 7009	CARBON 10K JA 1/4W	1
R416	401 024 7400	CARBON 10K JA 1/6W	1
R417	401 016 2604	CARBON 220 JA 1/4W	1
R418	401 025 4606	CARBON 18K JA 1/6W	1
R419	401 025 8208	CARBON 22K JA 1/6W	1
R420	401 025 8208	CARBON 22K JA 1/6W	1
R421	401 012 7009	CARBON 10K JA 1/4W	1
R422	401 024 7400	CARBON 10K JA 1/6W	1
R423	401 020 2003	CARBON 4.7K JA 1/4W	1
R424	401 020 2003	CARBON 4.7K JA 1/4W	1
R425	401 027 2600	CARBON 5.6K JA 1/6W	1
R426	401 027 2600	CARBON 5.6K JA 1/6W	1
R427	401 025 7805	CARBON 2.2K JA 1/6W	1
R428	401 025 7805	CARBON 2.2K JA 1/6W	1
R429	401 026 4605	CARBON 33K JA 1/6W	1
R430	401 026 4605	CARBON 33K JA 1/6W	1
R431	401 025 8703	CARBON 220K JA 1/6W	1
R432	401 025 8703	CARBON 220K JA 1/6W	1
R433	401 024 9305	CARBON 1.2K JA 1/6W	1
R434	401 024 9305	CARBON 1.2K JA 1/6W	1
R435	401 024 7400	CARBON 10K JA 1/6W	1
R436	401 024 7400	CARBON 10K JA 1/6W	1
R437	401 025 8703	CARBON 220K JA 1/6W	1
R438	401 025 8703	CARBON 220K JA 1/6W	1
R439	401 026 4308	CARBON 3.3K JA 1/6W	1
R440	401 026 4308	CARBON 3.3K JA 1/6W	1
R441	401 026 9907	CARBON 4.7K JA 1/6W	1
R442	401 026 9907	CARBON 4.7K JA 1/6W	1
R443	401 024 6700	CARBON 100 JA 1/6W	1
R444	401 024 6700	CARBON 100 JA 1/6W	1
R445	401 026 3905	CARBON 330 JA 1/6W	1
R446	401 026 3905	CARBON 330 JA 1/6W	1
R447	401 025 7805	CARBON 2.2K JA 1/6W	1
R448	401 025 7805	CARBON 2.2K JA 1/6W	1
R449	401 016 2604	CARBON 220 JA 1/4W	1
R450	401 024 7400	CARBON 10K JA 1/6W	1
R451	401 024 7400	CARBON 10K JA 1/6W	1
R452	401 024 7400	CARBON 10K JA 1/6W	1
R453	401 024 7400	CARBON 10K JA 1/6W	1
R454	401 025 8208	CARBON 22K JA 1/6W	1
R455	401 024 7400	CARBON 10K JA 1/6W	1
R456	401 025 8208	CARBON 22K JA 1/6W	1
R457	401 024 7400	CARBON 10K JA 1/6W	1
R458	401 012 4503	CARBON 100 JA 1/4W	1
R459	401 024 7004	CARBON 1K JA 1/6W	1
R460	401 024 7004	CARBON 1K JA 1/6W	1
R461	401 024 7707	CARBON 100K JA 1/6W	1
R462	401 024 7707	CARBON 100K JA 1/6W	1
R463	401 025 7805	CARBON 2.2K JA 1/6W	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
R464	401 025 7805	CARBON 2.2K JA 1/6W	1
R465	401 024 7707	CARBON 100K JA 1/6W	1
R466	401 024 7707	CARBON 100K JA 1/6W	1
R467	401 024 7707	CARBON 100K JA 1/6W	1
R468	401 024 7707	CARBON 100K JA 1/6W	1
R469	401 026 3905	CARBON 330 JA 1/6W	1
R470	401 026 3905	CARBON 330 JA 1/6W	1
R471	401 025 8703	CARBON 220K JA 1/6W	1
R472	401 025 8703	CARBON 220K JA 1/6W	1
R473	401 025 1902	CARBON 15K JA 1/6W	1
R474	401 025 1902	CARBON 15K JA 1/6W	1
R475	401 024 7707	CARBON 100K JA 1/6W	1
R476	401 024 7707	CARBON 100K JA 1/6W	1
R477	401 016 2604	CARBON 220 JA 1/4W	1
R478	401 016 2604	CARBON 220 JA 1/4W	1
R479	401 024 7707	CARBON 100K JA 1/6W	1
R480	401 024 7707	CARBON 100K JA 1/6W	1
R481	401 026 9907	CARBON 4.7K JA 1/6W	1
R482	401 020 2003	CARBON 4.7K JA 1/4W	1
R483	401 027 5502	CARBON 6.8K JA 1/6W	1
R484	401 027 5502	CARBON 6.8K JA 1/6W	1
R485	401 024 7400	CARBON 10K JA 1/6W	1
R486	401 024 7004	CARBON 1K JA 1/6W	1
R487	401 024 7004	CARBON 1K JA 1/6W	1
R488	401 024 9701	CARBON 12K JA 1/6W	1
R489	401 024 9701	CARBON 12K JA 1/6W	1
R490	401 157 2105	CARBON 10M JA 1/6W	1
R491	401 157 2105	CARBON 10M JA 1/6W	1
R492	401 024 6700	CARBON 100 JA 1/6W	1
R493	401 024 6700	CARBON 100 JA 1/6W	1
R494	401 025 7409	CARBON 220 JA 1/6W	1
R495	401 025 7409	CARBON 220 JA 1/6W	1
R496	401 013 7305	CARBON 120K JA 1/4W	1
R497	401 013 7305	CARBON 120K JA 1/4W	1
R498	401 016 2604	CARBON 220 JA 1/4W	1
R499	401 024 7004	CARBON 1K JA 1/6W	1
R500	401 012 5708	CARBON 1K JA 1/4W	1
R501	401 027 3003	CARBON 56K JA 1/6W	1
R502	401 027 3003	CARBON 56K JA 1/6W	1
R503	401 026 4308	CARBON 3.3K JA 1/6W	1
R504	401 026 4308	CARBON 3.3K JA 1/6W	1
R505	401 026 6609	CARBON 390 JA 1/6W	1
R506	401 026 6609	CARBON 390 JA 1/6W	1
R507	401 027 3003	CARBON 56K JA 1/6W	1
R508	401 021 4105	CARBON 56K JA 1/4W	1
R509	401 016 3809	CARBON 2.2K JA 1/4W	1
R510	401 016 3809	CARBON 2.2K JA 1/4W	1
R511	402 040 5906	OXIDE-MT 2.2K JB 1/2W	1
R512	402 040 5906	OXIDE-MT 2.2K JB 1/2W	1
R513	402 015 3104	FUSIBLE RES 100 J- 1/4W	1
R514	402 015 3104	FUSIBLE RES 100 J- 1/4W	1
R515	402 039 5603	OXIDE-MT 4.7K JB 1/2W	1
R516	402 016 4506	FUSIBLE RES 10 J- 1/2W	1
R517	402 016 4506	FUSIBLE RES 10 J- 1/2W	1
R518	402 040 4909	OXIDE-MT 270 JB 1/2W	1
R519	402 040 4909	OXIDE-MT 270 JB 1/2W	1
R520	402 040 5005	OXIDE-MT 150 JB 1/2W	1
R521	402 040 5005	OXIDE-MT 150 JB 1/2W	1
R522	402 040 6200	OXIDE-MT 100 JB 1/2W	1
R523	402 040 6200	OXIDE-MT 100 JB 1/2W	1
R524	401 026 9907	CARBON 4.7K JA 1/6W	1
R525	401 024 6700	CARBON 100 JA 1/6W	1
R526	401 024 9305	CARBON 1.2K JA 1/6W	1
R527	401 026 7408	CARBON 39K JA 1/6W	1
R528	401 024 7707	CARBON 100K JA 1/6W	1
R529	401 025 8208	CARBON 22K JA 1/6W	1
R530	401 025 8208	CARBON 22K JA 1/6W	1
R531	401 025 8208	CARBON 22K JA 1/6W	1
R532	401 024 7400	CARBON 10K JA 1/6W	1
R533	401 021 3009	CARBON 5.6K JA 1/4W	1
R534	401 024 7707	CARBON 100K JA 1/6W	1
R535	401 024 7707	CARBON 100K JA 1/6W	1
R536	401 024 7707	CARBON 100K JA 1/6W	1
R537	401 024 7707	CARBON 100K JA 1/6W	1
R538	401 024 7707	CARBON 100K JA 1/6W	1
R539	401 024 7707	CARBON 100K JA 1/6W	1
R540	401 024 7707	CARBON 100K JA 1/6W	1
R541	401 019 3004	CARBON 39K JA 1/4W	1
R542	401 026 7408	CARBON 39K JA 1/6W	1
R543	401 024 7400	CARBON 10K JA 1/6W	1
R544	401 025 8208	CARBON 22K JA 1/6W	1
R545	401 026 4308	CARBON 3.3K JA 1/6W	1
R546	401 024 7707	CARBON 100K JA 1/6W	1
R547	401 024 7004	CARBON 1K JA 1/6W	1
R548	401 027 2600	CARBON 5.6K JA 1/6W	1
R549	401 024 8001	CARBON 1M JA 1/6W	1
R550	401 025 8703	CARBON 220K JA 1/6W	1
R551	402 040 5104	OXIDE-MT 680 JB 1/2W	1
R552	402 040 5104	OXIDE-MT 680 JB 1/2W	1
R553	402 040 6507	OXIDE-MT 330 JB 1/2W	1
R554	402 040 6507	OXIDE-MT 330 JB 1/2W	1
R555	401 012 7009	CARBON 10K JA 1/4W	1
R556	401 012 7009	CARBON 10K JA 1/4W	1
R557	401 012 7009	CARBON 10K JA 1/4W	1
R558	401 024 7400	CARBON 10K JA 1/6W	1
R559	401 024 7400	CARBON 10K JA 1/6W	1
R560	401 024 7004	CARBON 1K JA 1/6W	1
R561	401 024 7004	CARBON 1K JA 1/6W	1
R562	401 025 0004	CARBON 120K JA 1/6W	1
R563	401 025 0004	CARBON 120K JA 1/6W	1
R564	401 024 7707	CARBON 100K JA 1/6W	1
R565	401 024 7707	CARBON 100K JA 1/6W	1
R566	401 027 8602	CARBON 8.2K JA 1/6W	1
R567	401 027 8602	CARBON 8.2K JA 1/6W	1
R568	401 026 4308	CARBON 3.3K JA 1/6W	1
R569	401 026 4308	CARBON 3.3K JA 1/6W	1
R570	401 027 5502	CARBON 6.8K JA 1/6W	1
R571	401 027 5502	CARBON 6.8K JA 1/6W	1
R572	401 022 1905	CARBON 680 JA 1/4W	1
R573	401 025 4903	CARBON 180K JA 1/6W	1
R574	401 024 7400	CARBON 10K JA 1/6W	1
R575	401 024 7400	CARBON 10K JA 1/6W	1
R576	401 024 7707	CARBON 100K JA 1/6W	1

ASSY,PCB,CONTROL

Ref. No.	Part No.	Description	Q'ty
54	620 207 8908	Assy,PCB,Control	1
	620 206 5793	Spacer,LED	1
	620 207 9615	Assy,Wire,2P	1
	620 208 7269	Assy,Wire,3P	1
HL200	620 200 2620	Socket,Holder,3P	1
HL201	620 200 2620	Socket,Holder,3P	1
PL200	620 208 2806	Connector-P,16P 5532	1
PL201	620 208 2806	Connector-P,16P 5532	1
RM200	620 202 4615	Converter,Remote Control	1
or	620 200 0909	Converter,Remote,DET	1
SC200	620 205 5923	Connector-S,10P,52170	1
SC201	620 205 5916	Connector-S,9P,52170	1
SC202	620 205 5923	Connector-S,10P,52170	1
SW200	620 202 6725	Switch,Tact (DOWN)	1
SW201	620 202 6725	Switch,Tact (UP)	1
SW202	620 202 6725	Switch,Tact (AUTO/MANUAL)	1
SW203	620 202 6725	Switch,Tact (ST/MONO)	1
SW204	620 202 6725	Switch,Tact (MW/LW)	1
SW205	620 202 6725	Switch,Tact (FM/123)	1
SW206	620 202 6725	Switch,Tact (1)	1
SW207	620 202 6725	Switch,Tact (2)	1
SW208	620 202 6725	Switch,Tact (3)	1
SW209	620 202 6725	Switch,Tact (4)	1
SW210	620 202 6725	Switch,Tact (5)	1
SW211	620 202 6725	Switch,Tact (6)	1
SW212	620 202 6725	Switch,Tact (PHONO)	1
SW213	620 202 6725	Switch,Tact (AUX)	1
SW214	620 202 6725	Switch,Tact (CD)	1
SW215	620 202 6725	Switch,Tact (TUNER)	1
SW216	620 202 6725	Switch,Tact (TAPE)	1
VR200	620 207 9240	VR,Rotary,2X100KSW (BASS)	1
VR201	620 207 9240	VR,Rotary,2X100KSW (TREBLE)	1
VR202	620 207 9264	VR,Rotary,2X50KMN (BALANCE)	1
X200	620 007 1338	Crystal 7.2MHz	1
or	620 007 1321	Crystal 7.2MHz	1
IC200	409 018 4909	IC LA6458S	1
IC201	409 141 6405	IC TC9173P	1
IC202	409 241 0402	IC TC9309F-019	1
IC203	409 114 4803	IC LB1641	1
Q200	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 3804	TR 2SC536-G-NP-AA	1
Q201	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 3804	TR 2SC536-G-NP-AA	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
Q202	405 085 5900	TR 2SK246-Y1	1
or	405 085 5801	TR 2SK246-Y2	1
Q203	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 3804	TR 2SC536-G-NP-AA	1
Q204	405 019 2708	TR 2SC536-F-NP-AA	1
or	405 019 3804	TR 2SC536-G-NP-AA	1
Q205	405 018 2600	TR 2SC3400-AC	1
DL200	407 137 7009	LED LN424YPH	1
DL201	407 137 7009	LED LN424YPH	1
DL202	407 137 7009	LED LN424YPH	1
DL203	407 137 7009	LED LN424YPH	1
DL204	407 137 7009	LED LN424YPH	1
D200	407 060 3703	DIODE 1SS292	1
D201	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D202	407 005 3805	DIODE DS442-BT	1
D203	407 005 3805	DIODE DS442-BT	1
D204	407 050 3706	ZENER DIODE GZA4.7Y-BT	1
D205	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
D206	407 125 8209	DIODE HSS271	1
or	407 008 0405	DIODE GMB01-BT	1
C200	403 051 2304	ELECT 4.7U M 50V	1
C201	403 051 2304	ELECT 4.7U M 50V	1
C202	403 074 9205	CERAMIC 680P K 50V	1
C203	403 074 9205	CERAMIC 680P K 50V	1
C204	403 071 6207	CERAMIC 220P K 50V	1
C205	403 071 6207	CERAMIC 220P K 50V	1
C206	403 071 6207	CERAMIC 220P K 50V	1
C207	403 071 6207	CERAMIC 220P K 50V	1
C208	403 045 7407	ELECT 22U M 25V	1
C209	403 045 7407	ELECT 22U M 25V	1
C210	403 051 2304	ELECT 4.7U M 50V	1
C211	403 051 2304	ELECT 4.7U M 50V	1
C212	403 058 3403	POLYESTER 0.015U K 50V	1
C213	403 058 3403	POLYESTER 0.015U K 50V	1
C214	403 063 5904	POLYESTER 8200P K 50V	1
C215	403 063 5904	POLYESTER 8200P K 50V	1
C216	403 050 8000	ELECT 3.3U M 50V	1
C217	403 050 8000	ELECT 3.3U M 50V	1
C218	403 044 0706	ELECT 47U M 16V	1
C219	403 044 0706	ELECT 47U M 16V	1
C220	403 042 3907	ELECT 100U M 16V	1
C221	403 051 2304	ELECT 4.7U M 50V	1
C222	403 001 1906	CERAMIC 0.01U M 16V	1
C223	403 001 1906	CERAMIC 0.01U M 16V	1
C224	403 038 2709	ELECT 100U M 6.3V	1
C225	403 001 1906	CERAMIC 0.01U M 16V	1
C226	403 022 5907	CERAMIC 33P J 50V	1
C227	403 022 5907	CERAMIC 33P J 50V	1
C228	403 069 8404	CERAMIC 0.01U Z 50V	1
C229	403 026 2209	CERAMIC 47P J 50V	1
C230	403 121 9509	CERAMIC 0.1U Z 50V	1
C231	403 143 2809	CERAMIC 0.047U Z 50V	1
C232	403 001 1906	CERAMIC 0.01U M 16V	1
C233	403 001 1906	CERAMIC 0.01U M 16V	1
C234	403 001 1906	CERAMIC 0.01U M 16V	1
C235	403 001 1906	CERAMIC 0.01U M 16V	1
R200	401 025 8703	CARBON 220K JA 1/6W	1
R201	401 025 8703	CARBON 220K JA 1/6W	1
R202	401 026 9907	CARBON 4.7K JA 1/6W	1
R203	401 026 9907	CARBON 4.7K JA 1/6W	1
R204	401 027 2600	CARBON 5.6K JA 1/6W	1
R205	401 027 2600	CARBON 5.6K JA 1/6W	1
R206	401 025 1605	CARBON 1.5K JA 1/6W	1
R207	401 025 1605	CARBON 1.5K JA 1/6W	1
R208	401 027 8602	CARBON 8.2K JA 1/6W	1
R209	401 027 8602	CARBON 8.2K JA 1/6W	1
R210	401 026 6609	CARBON 390 JA 1/6W	1
R211	401 026 6609	CARBON 390 JA 1/6W	1
R212	401 025 2305	CARBON 150K JA 1/6W	1
R213	401 025 2305	CARBON 150K JA 1/6W	1
R214	401 024 9305	CARBON 1.2K JA 1/6W	1
R215	401 024 9305	CARBON 1.2K JA 1/6W	1
R216	401 016 2604	CARBON 220 JA 1/4W	1
R217	401 016 2604	CARBON 220 JA 1/4W	1
R218	401 020 0801	CARBON 470 JA 1/4W	1
R219	401 024 7400	CARBON 10K JA 1/6W	1
R220	401 024 7004	CARBON 1K JA 1/6W	1
R221	401 027 5205	CARBON 680 JA 1/6W	1
R222	401 026 4308	CARBON 3.3K JA 1/6W	1
R223	401 018 3807	CARBON 3.3K JA 1/4W	1
R224	401 024 7400	CARBON 10K JA 1/6W	1
R225	401 024 7004	CARBON 1K JA 1/6W	1
R226	401 012 4503	CARBON 100 JA 1/4W	1
R227	401 012 7009	CARBON 10K JA 1/4W	1
R228	401 012 7009	CARBON 10K JA 1/4W	1
R229	401 012 7009	CARBON 10K JA 1/4W	1
R230	401 012 7009	CARBON 10K JA 1/4W	1
R231	401 018 3807	CARBON 3.3K JA 1/4W	1
R232	401 018 3807	CARBON 3.3K JA 1/4W	1
R233	401 018 3807	CARBON 3.3K JA 1/4W	1
R234	401 018 3807	CARBON 3.3K JA 1/4W	1
R235	401 018 3807	CARBON 3.3K JA 1/4W	1
R236	402 016 4506	FUSIBLE RES 10 J- 1/2W	1
R237	401 024 7004	CARBON 1K JA 1/6W	1
R238	401 026 3905	CARBON 330 JA 1/6W	1
R239	401 026 3905	CARBON 330 JA 1/6W	1
R240	401 026 3905	CARBON 330 JA 1/6W	1
R241	401 026 3905	CARBON 330 JA 1/6W	1
R242	401 026 3905	CARBON 330 JA 1/6W	1
R243	401 012 7009	CARBON 10K JA 1/4W	1
R244	401 025 4200	CARBON 1.8K JA 1/6W	1
R245	401 025 4200	CARBON 1.8K JA 1/6W	1
R246	401 024 7400	CARBON 10K JA 1/6W	1
R247	401 024 7707	CARBON 100K JA 1/6W	1
R248	401 027 5908	CARBON 68K JA 1/6W	1
R249	401 027 0309	CARBON 47K JA 1/6W	1
R250	401 024 7400	CARBON 10K JA 1/6W	1
R251	401 024 7707	CARBON 100K JA 1/6W	1

ASSY,PCB,POWER

Ref. No.	Part No.	Description	Q'ty
55	620 207 8939	Assy,PCB,Power	1
	620 022 2587	EC Terminal 1P	2
	620 207 9158	Fuse Holder,Taping	10
F650	⚠ 423 006 8700	FUSE 250V T3.15A	1
F651	⚠ 423 006 8700	FUSE 250V T3.15A	1
F652	⚠ 423 005 5205	FUSE 250V T1.6A	1
F653	⚠ 423 004 3301	FUSE 250V T0.8A	1
F654	⚠ 423 004 3301	FUSE 250V T0.8A	1
HL650	620 200 2637	Socket,Holder,5P	1
HL651	620 200 2637	Socket,Holder,5P	1
JM650	620 207 9592	Wire,5P	1
JM651	620 207 9585	Wire,5P	1

ASSY,PCB,LCD

Ref. No.	Part No.	Description	Q'ty
56	620 207 8953	Assy,PCB,LCD	1
	620 207 1961	Filter	1
	620 207 9172	LCD,Tuner	1
	620 053 9821	Reflector	1
SC800	620 208 2820	Connector-S,16P,5533	1
SC801	620 208 2820	Connector-S,16P,5533	1

ASSY,PCB,SWITCH

Ref. No.	Part No.	Description	Q'ty
57	620 207 8960	Assy,PCB,Switch	1
	620 207 0568	Bracket-M,Push Switch	1
HL760	620 200 2590	Socket,Holder,7P	1
JM760	620 207 9493	Wire,7P	1
SW750	620 208 3827	Switch,Push,1K-2P-2T (DOLBY B NR)	1
SW751	620 208 3827	Switch,Push,1K-2P-2T (TAPE SELECTOR)	1
SW752	620 208 3827	Switch,Push,1K-2P-2T (DUBBING)	1
SW753	620 208 3827	Switch,Push,1K-2P-2T (SPEED)	1

ASSY,PCB,VOLUME

Ref. No.	Part No.	Description	Q'ty
58	620 207 8977	Assy,PCB,Volume	1
	620 207 9554	Assy,Wire,3P	1
HL600	620 201 0144	Socket,Holder,2P	1
HL606	620 200 2620	Socket,Holder,3P	1
VR600	620 206 3751	VR,Rotary,2X50KA,Motor	1
C600	404 032 2207	ELECT 2200U M 10V	1
C601	403 001 1906	CERAMIC 0.01U M 16V	1
C602	403 001 1906	CERAMIC 0.01U M 16V	1
R600	401 025 7805	CARBON 2.2K JA 1/6W	1
R601	401 025 7805	CARBON 2.2K JA 1/6W	1

ASSY,PCB,POWER SWITCH

Ref. No.	Part No.	Description	Q'ty
59	620 207 8984	Assy,PCB,Power Switch	1
	⚠ 620 207 7550	Switch,Push,1P-1T,TV-3	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
	620 053 7025	Cover Safety	1
C851	⚠ 620 006 6679	Capacitor 0.01MF400V	1
ASSY,PCB,LAMP			
60	620 207 8991	Assy,PCB,Lamp	1
	620 052 0171	Spacer	2
LP900	620 207 9189	Lamp	1
LP901	620 207 9189	Lamp	1
ASSY,PCB,VOLUME INDICATOR			
61	620 207 9004	Assy,PCB,Volume Indicator	1
DL700	407 033 9206	LED SLP-446B-50	1

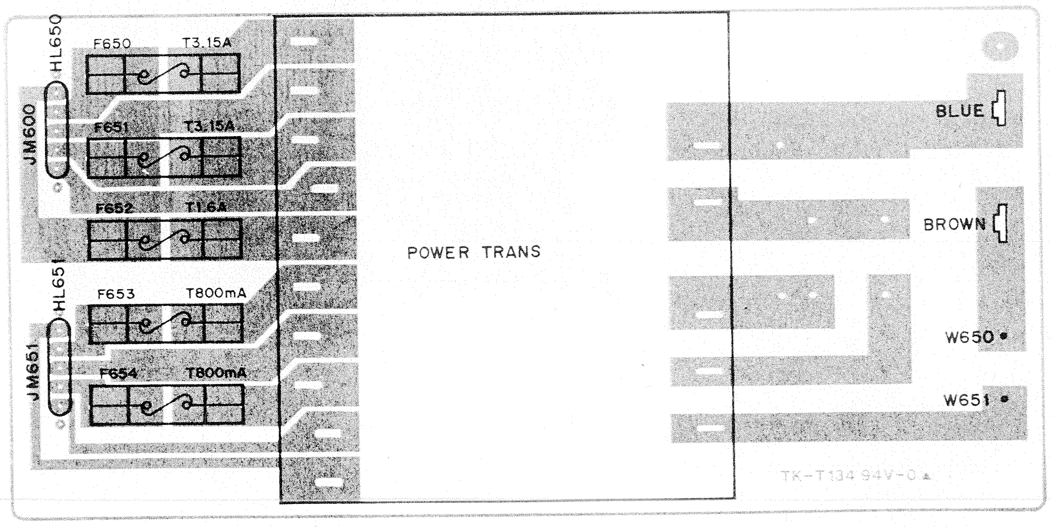
NOTES:

1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with ⚠, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

POWER TRANS P.C.BOARD
(BOTTOM VIEW)



IC & TRANSISTOR LEAD REFERENCE VOLTAGES TABLE

Voltage Table of CD Main P.C.Board

IC PIN NUMBERS DC VOLTAGES

Ref. No.	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
IC51	LA9200NM	0V	0.5V	0.5V	0.6V	0.5V	0.5V	0.5V	0.5V	0.5V	0.5V	0.5V	0.5V	0V	0V	0.2V	0.5V	0V	0V	0V	0V
		21	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**
		0.5V	0V	0V	0V	0.5V	0.4V	4.0V	0.5V	0.5V	0.5V	0.4V	3.1V	0.5V	0.5V	2.4V	2.4V	0.1V	2.4V	0V	0V
		41	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**
		0.2V	0.1V	0.1V	0.6V	0.1V	0.1V	0V	0V	–	–	–	–	–	–	–	–	–	–	–	–

IC PIN NUMBERS DC VOLTAGES

Ref. No.	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
IC52	LC7860K	0V	2.3V	2.3V	2.4V	0V	2.4V	1.7V	0V	0V	5.0V	0V	0V	0V	2.9V	0V	4.2V	4.2V	0V	4.9V	0V
		21	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**
		0V	0V	0V	0V	0V	0V	5.0V	0V	0V	0V	5.0V	0V	0V	0V	0V	0V	0V	5.0V	0V	0V
		41	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**
		5.0V	5.0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V
		61	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**
		0V	0V	0V	0V	5.0V	0.8V	0V	0V	0V	0V	0V	0V	0V	0V	5.0V	0V	0V	0V	0V	2.4V

IC PIN NUMBERS DC VOLTAGES

Ref. No.	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
IC53	LC3517BS	0V	0V	0V	0V	0V	0V	0V	0V	0.4V	0.4V	0.4V	0V	0V	0V	0V	0V	0V	0V	0V	5.0V
		21	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**
		5.0V	0V	0V	0V	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

IC PIN NUMBERS DC VOLTAGES

Ref. No.	DEVICE	1	2	3	4	5	6	7	8	9	10
IC54	LA6510	-0.8V	-0.7V	-0.7V	-0.7V	-0.4V	-0.8V	-0.8V	-0.8V	-0.8V	5.6V
IC55	LA6510	0V	0V	0V	0V	-9.3V	0V	0V	0V	0V	10.0V
IC56	NJM78M05	5.0V	0V	10.5V	–	–	–	–	–	–	–
IC57	NJM79L05A	0V	-10.8V	-4.9V	–	–	–	–	–	–	–

IC PIN NUMBERS DC VOLTAGES

Ref. No.	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
IC58	LC97000P	0V	0V	0V	0V	0.7V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V
		21	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**
		0V	0V	0V	0V	0V	0V	0V	0V	–	–	–	–	–	–	–	–	–	–	–	–

IC PIN NUMBERS DC VOLTAGES

Ref. No.	DEVICE	1	2	3	4	5	6	7	8
IC59	UPC4570C	0.3V	0.3V	0.2V	-4.7V	0.2V	0.3V	0.3V	4.8V

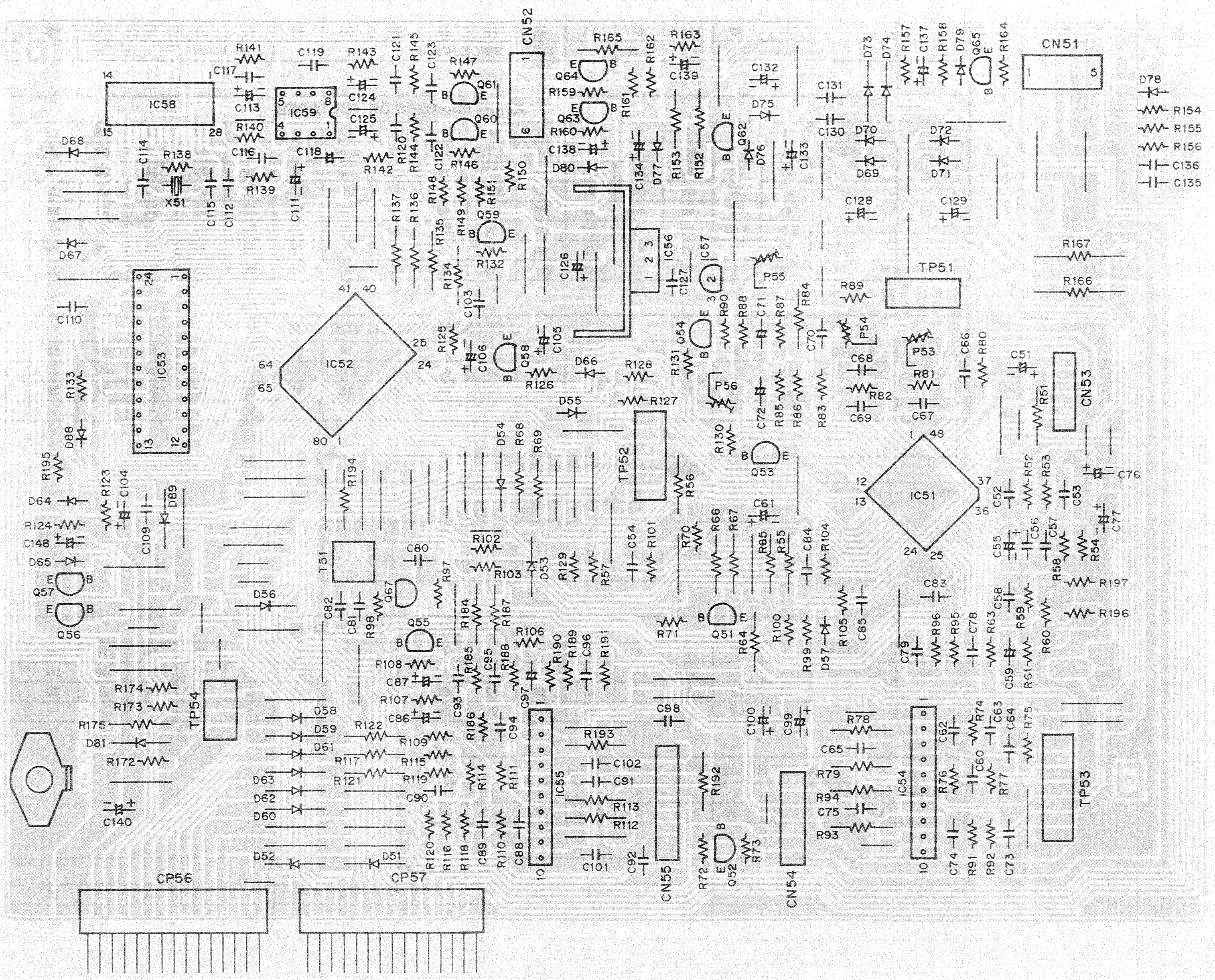
IC PIN NUMBERS DC VOLTAGES

Ref. No.	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
IC60	M50954	5.0V	0V	0V	0V	0V	5.0V	0V	4.3V	5.0V	0V	4.8V	5.3V	5.0V	4.0V	4.3V	0V	5.0V	0V	0V	0V
		21	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**
		0V	0V	5.0V	5.0V	0V	0V	5.0V	2.1V	1.5V	0.8V	5.0V	0V	0V	-0.9V	-0.9V	-0.9V	-0.9V	-27.3V	-27.1V	-27.1V
		41	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**
		-24.6V	-24.7V	-24.7V	-24.7V	-24.7V	-24.7V	-24.7V	-24.8V	-24.7V	-24.7V	-24.8V	-24.8V	-27.1V	-27.1V	-27.1V	-17.9V	-27.1V	-8.8V	-8.9V	-8.9V
		61	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**
		-1.0V	-3.5V	-6.1V	-6.3V	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	-

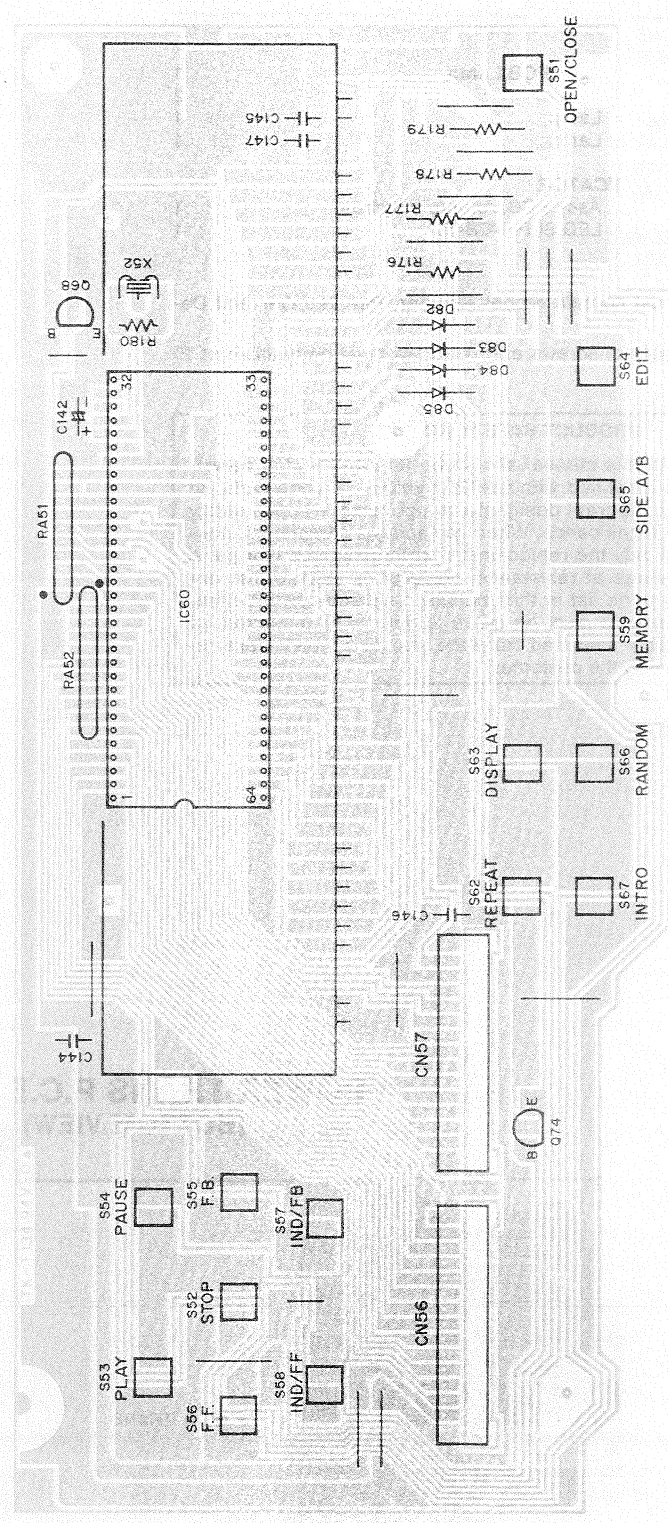
TRANSISTOR DC VOLTAGES (CD)

Ref. No.	DEVICE	B	C	E	Ref. No.	DEVICE	B	C	E	Ref. No.	DEVICE	B	C	E
Q51	2SC536	0.5V	0V	0V	Q57	2SC3400	4.3V	0V	0V	Q63	2SA608	3.8V	4.4V	4.4V
Q52	2SA608	4.7V	5.0V	5.0V	Q58	2SC3400	-0.8V	0.3V	-0.8V	Q64	2SC536	0.6V	0V	0V
Q53	2SC536	0.6V	0V	0V	Q59	2SA608	1.3V	-0.7V	1.2V	Q65	2SC3400	6.1V	0V	0V
Q54	2SC536	0.6V	0V	0V	Q60	2SD1012	-0.5V	-0.7V	-0.7V	Q68	2SC3400	1.7V	0V	2.1V
Q55	2SD1012	0.6V	0V	0V	Q61	2SD1012	-0.5V	-0.7V	-0.7V	Q74	2SA1346	4.8V	-0.9V	4.8V
Q56	2SC3400	4.3V	0V	0V	Q62	2SA608	-28.0V	-28.7V	-27.3V					

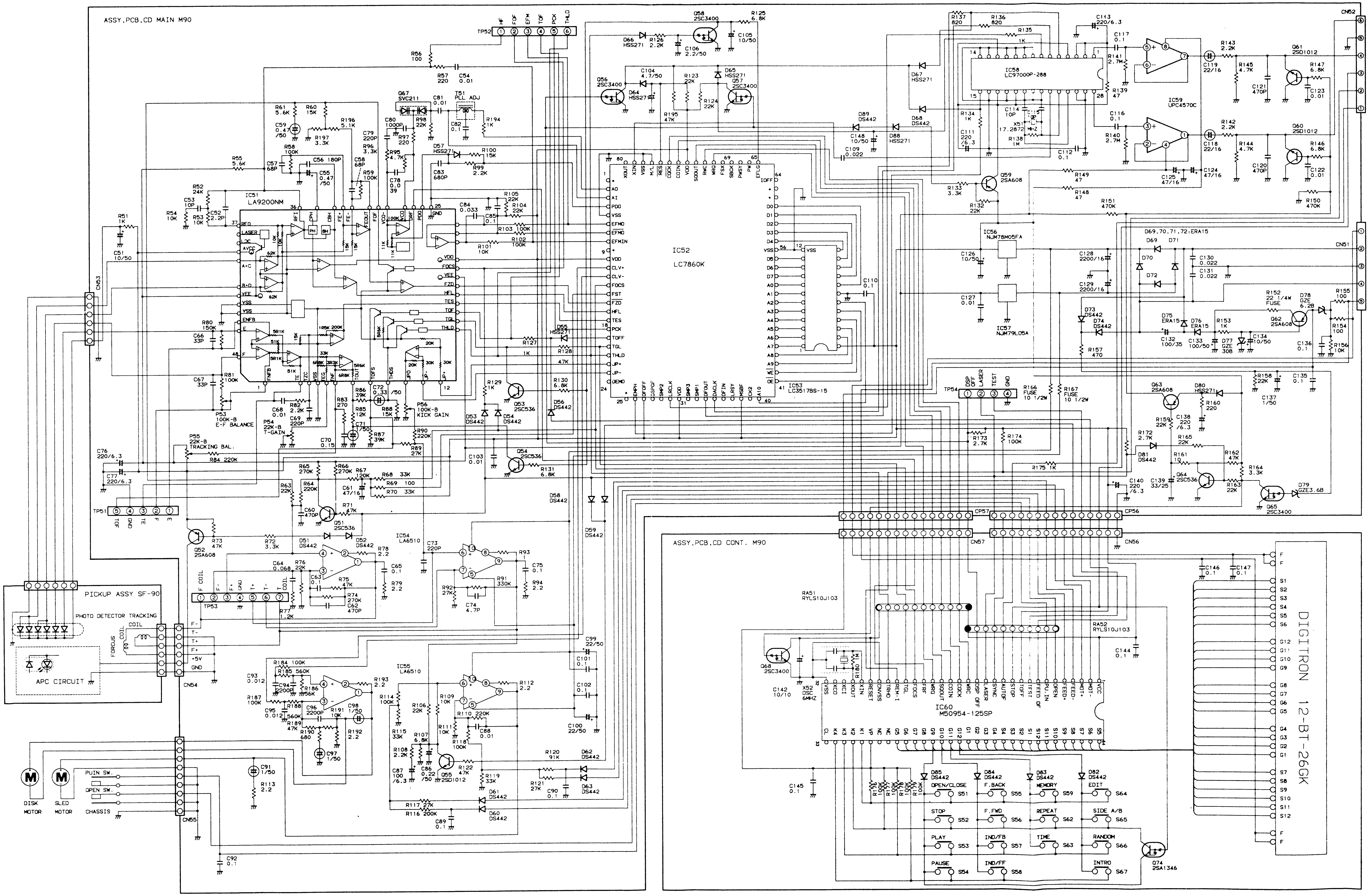
CD MAIN P.C.BOARD
(BOTTOM VIEW)


IC58
IC59
IC53
IC52
IC51
IC54
IC55
IC56
IC57
CN51
CN52
CN53
CN54
CN55
CP56
CP57
TP51
TP52
TP53
TP54
T51
X51
P53
P54
P55
P56
Q51
Q52
Q53
Q54
Q55
Q56
Q57
Q58
Q59
Q60
Q61
Q63
Q64
Q65
Q67

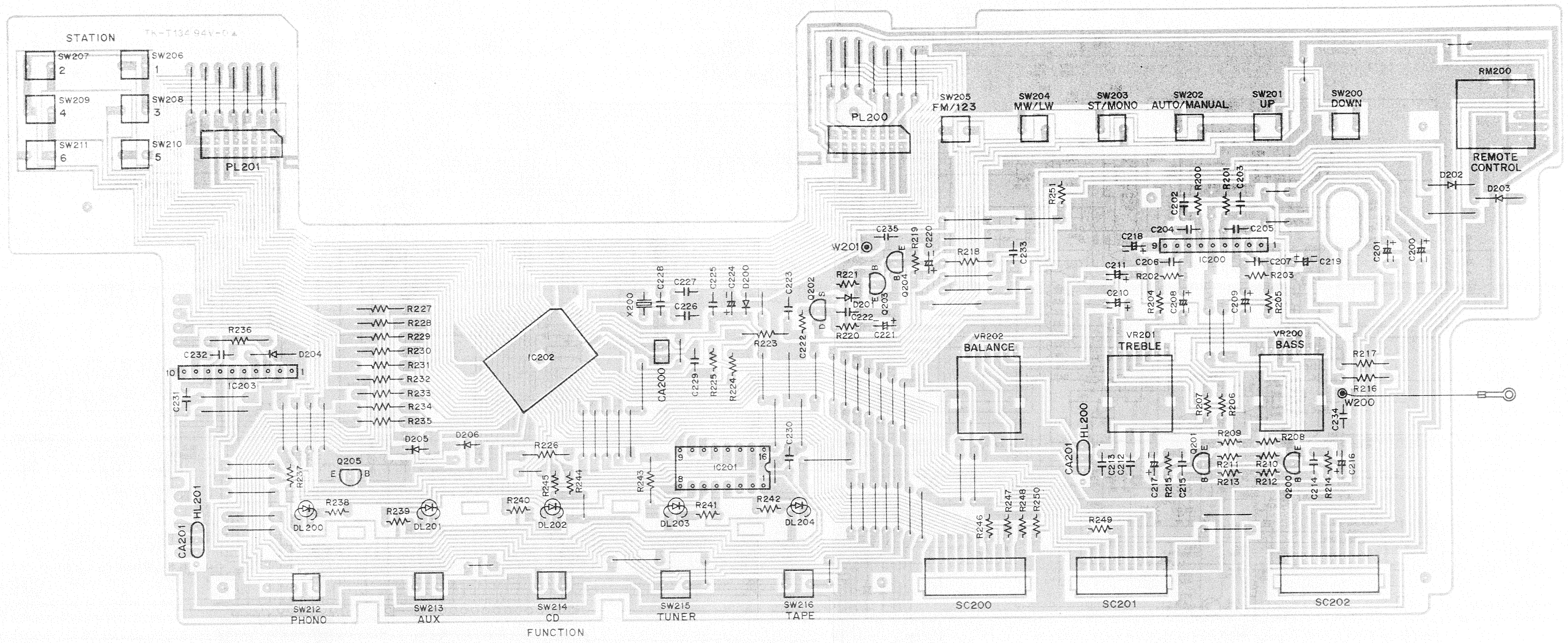
CD CONTROL P.C.BOARD
(BOTTOM VIEW)


S51 OPEN/CLOSE
S64 EDIT
S65 SIDE A/B
S59 MEMORY
S63 DISPLAY
S66 RANDOM
S62 REPEAT
S67 INTRO
S54 PAUSE
S55 F.B
S57 IND/FB
S52 STOP
S53 PLAY
S56 F.F.
S58 IND/FF
IC60
RA51
RA52
CN56
CN57
X52
Q68
Q74

SCHEMATIC DIAGRAM (CD Main/Control Section)


ASSY.PCB.CD MAIN M90
ASSY.PCB.CD CONT. M90
IC51 LA9200NM
IC52 LC7860K
IC53 LC3517BS-15
IC54 LA6510
IC55 LA6510
IC56 NJM78M05FA
IC57 NJM79L05A
IC58 LC97000P-288
IC59 UPC4570C
IC60 M50954-125SP
TP51
TP52
TP53
TP54
CN51
CN52
CN53
CN54
CN55
CN56
CN57
CP56
CP57
TO ASSY.PCB MAIN JM352
TO ASSY.PCB POWER JM651
PICKUP ASSY SF-90
PHOTO DETECTOR TRACKING COIL
FOCUS COIL
APC CIRCUIT
DISK MOTOR
SLED MOTOR
PUIN SW.
OPEN SW.
CHASSIS
P53 100K-B E-F BALANCE
P54 22K-B T-GAIN
P55 22K-B TRACKING BAL.
P56 100K-B KICK GAIN
T51 PLL ADJ
X51 17.2872 MHZ
X52 OSC 6MHZ
RA51 RYLS10J103
RA52 RYLS10J103
D69,70,71,72:ERA15
DIGITRON 12-BT-26GK
OPEN/CLOSE S51
STOP S52
PLAY S53
PAUSE S54
F.BACK S55
F.FWD S56
IND/FB S57
IND/FF S58
MEMORY S59
REPEAT S62
TIME S63
EDIT S64
SIDE A/B S65
RANDOM S66
INTRO S67
Q74 2SA1346

CONTROL PRINTED CIRCUIT BOARD
(BOTTOM VIEW)


STATION
TK-T134 94V-0
SW207 2
SW206 1
SW209 4
SW208 3
SW211 6
SW210 5
PL201
PL200
SW205 FM/123
SW204 MW/LW
SW203 ST/MONO
SW202 AUTO/MANUAL
SW201 UP
SW200 DOWN
RM200
REMOTE CONTROL
D202
D203
R251
C202
R200
R201
C203
C204
C205
C218
IC200
C206
C207
C219
C211
R202
R203
C210
R204
C208
C209
R205
C201
C200
W201
C235
R219
C220
R218
C233
R221
Q204
Q203
D201
C222
R220
C221
Q202
C223
D200
C224
C225
C227
C226
C228
X200
R223
C222
R224
R225
C229
CA200
IC202
R227
R228
R229
R230
R231
R232
R233
R234
R235
R236
C232
D204
IC203
C231
D205
D206
R226
Q205
R237
R238
R239
R240
R245
R244
R243
IC201
C230
R241
R242
DL200
DL201
DL202
DL203
DL204
HL201
CA201
VR202 BALANCE
VR201 TREBLE
VR200 BASS
R217
R216
W200
C234
R207
R206
R209
R208
HL200
CA201
C213
C212
C217
R215
C215
Q201
R211
R213
R210
R212
Q200
C214
R214
C216
R246
R247
R248
R250
R249
SC200
SC201
SC202
SW212 PHONO
SW213 AUX
SW214 CD
SW215 TUNER
SW216 TAPE
FUNCTION

Voltage Table of Control P.C.Board

IC PIN NUMBERS DC VOLTAGES											
Ref. No.	DEVICE	1	2	3	4	5	6	7	8	9	10
IC200	LA6458S	13.8V	0V	0V	0V	– 13.3V	0V	0V	0V	13.8V	–

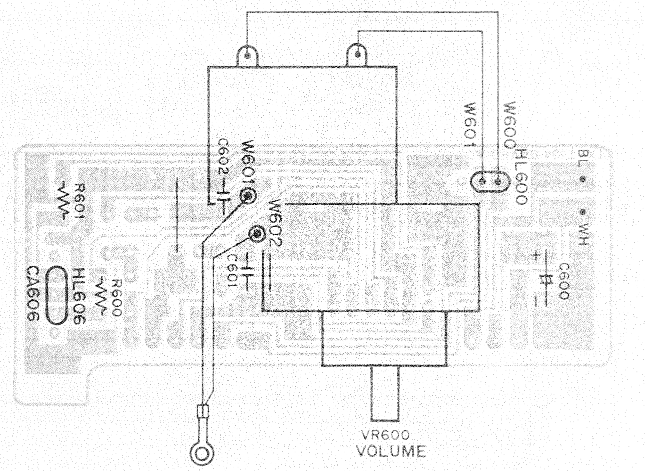
IC PIN NUMBERS DC VOLTAGES																	
Ref. No.	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
IC201	TC9173P	0V	0.1V	0.1V	4.2V	0.3V	4.3V	4.2V	4.2V	0V	0V	0V	0V	0V	0V	0V	5.6V

IC PIN NUMBERS DC VOLTAGES																					
Ref. No.	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
IC202	TC9309F	2.4V	2.4V	2.4V	2.4V	2.5V	2.4V	2.4V	2.4V	2.4V	2.4V	2.4V	2.4V	2.4V	2.4V	2.4V	2.4V	2.4V	2.4V	2.4V	2.4V
		21	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**
		2.4V	2.4V	2.4V	2.4V	2.4V	2.4V	2.4V	2.4V	2.4V	0V	0V	0V	0V	0V	4.8V	0V	4.8V	4.8V	4.8V	0V
		41	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**
		0.5V	0.5V	0.5V	0.5V	0.5V	4.8V	0.5V	4.8V	4.8V	4.8V	0.5V	5.3V	5.3V	0V	0V	0V	0V	3.9V	3.5V	0V
		61	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**
		0V	0V	0V	4.8V	0V	2.4V	1.4V	1.4V	0V	2.4V	0V	0V	0V	2.5V	2.3V	2.4V	2.4V	2.4V	2.4V	2.4V

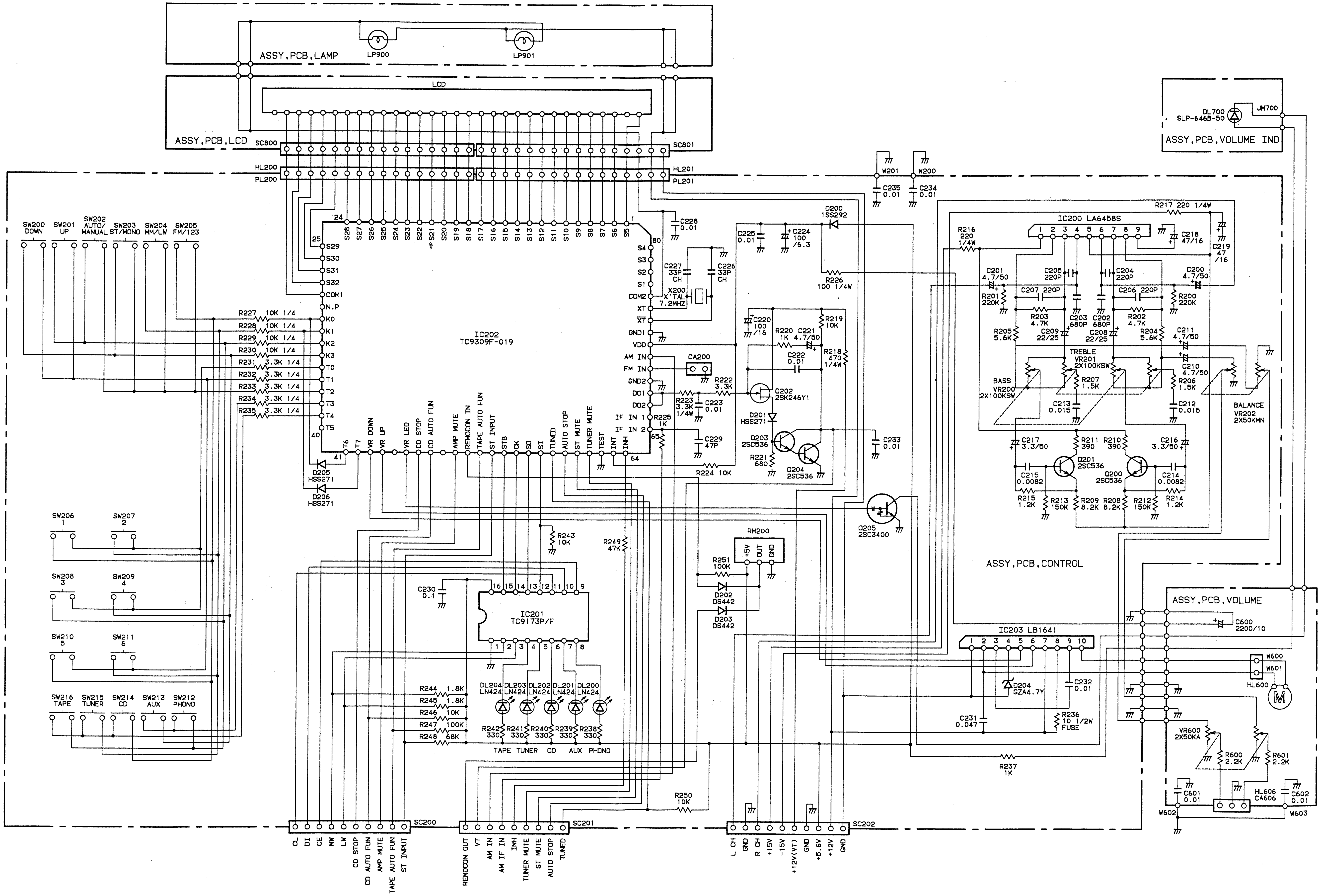
IC PIN NUMBERS DC VOLTAGES											
Ref. No.	DEVICE	1	2	3	4	5	6	7	8	9	10
IC203	LB1641	0V	0.5V	0.7V	0.6V	0V	0V	11.9V	11.9V	0.7V	0.5V

TRANSISTOR DC VOLTAGES (CONTROL)									
Ref. No.	DEVICE	B	C	E	Ref. No.	DEVICE	B	C	E
Q200	2SC536	– 1.0V	13.2V	– 1.7V	Q205	2SC3400	4.8V	0V	0V
Q201	2SC536	– 0.9V	13.2V	– 1.5V			**D**	**G**	**S**
Q203	2SC536	1.0V	2.9V	0.6V	Q202	2SK246	12.3V	1.5V	1.6V
Q204	2SC536	0.6V	2.9V	0V					

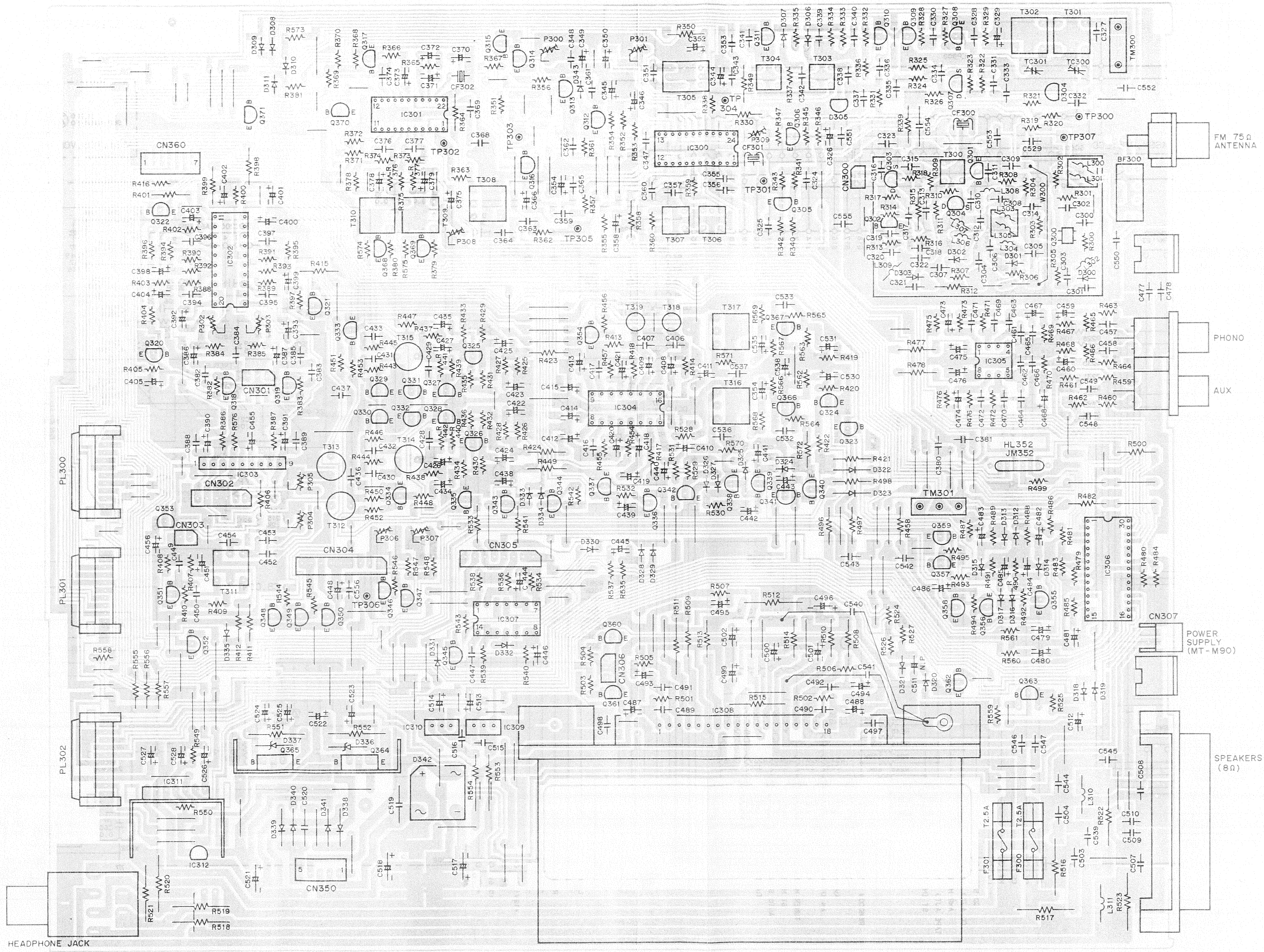
VOLUME P.C.BOARD
(BOTTOM VIEW)


W601
W600
HL600
BL
WH
C602
W601
W602
R601
C601
C600
R600
HL606
CA606
VR600
VOLUME

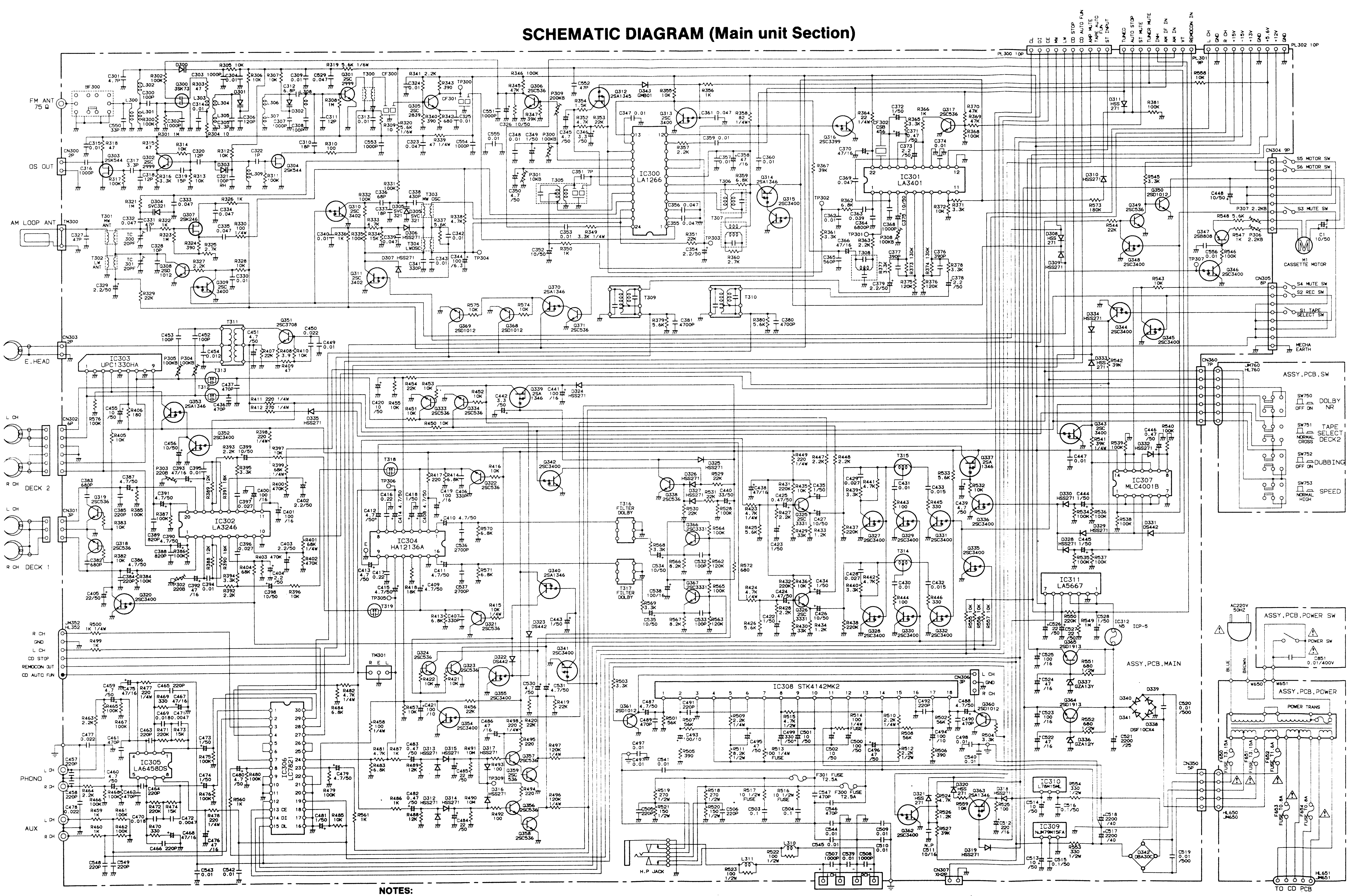
SCHEMATIC DIAGRAM (Amplifier Control Section)


ASSY,PCB,LAMP
LP900
LP901
LCD
ASSY,PCB,LCD
SC800
SC801
HL200
PL200
HL201
PL201
SW200 DOWN
SW201 UP
SW202 AUTO/ MANUAL
SW203 ST/MONO
SW204 MM/LW
SW205 FM/123
R227 10K 1/4
R228 10K 1/4
R229 10K 1/4
R230 10K 1/4
R231 3.3K 1/4
R232 3.3K 1/4
R233 3.3K 1/4
R234 3.3K 1/4
R235 3.3K 1/4
IC202 TC9309F-019
S29
S30
S31
S32
COM1
N.P
K0
K1
K2
K3
T0
T1
T2
T3
T4
T5
T6
T7
S28
S27
S26
S25
S24
S23
S22
S21
S20
S19
S18
S17
S16
S15
S14
S13
S12
S11
S10
S9
S8
S7
S6
S5
S4
S3
S2
S1
COM2
XT
GND1
VDD
AM IN
FM IN
GND2
DO1
DO2
IF IN 1
IF IN 2
VR DOWN
VR UP
VR LED
CD STOP
CD AUTO FUN
AMP MUTE
REMOCON IN
TAPE AUTO FUN
ST INPUT
STB
CK
SO
SI
TUNED
AUTO STOP
ST MUTE
TUNER MUTE
TEST
INT
INH
D205 HSS271
D206 HSS271
C227 33P CH
C226 33P CH
X200 X'TAL 7.2MHZ
C228 0.01
CA200
R222 3.3K
R223 3.3K 1/4W
C223 0.01
R225 1K
C229 47P
R224 10K
D200 1SS292
C225 0.01
C224 100 /6.3
R226 100 1/4W
C220 100 /16
R220 1K
C221 4.7/50
R219 10K
C222 0.01
R218 470 1/4W
Q202 2SK246Y1
D201 HSS271
Q203 2SC536
R221 680
Q204 2SC536
C233 0.01
Q205 2SC3400
W201
W200
C235 0.01
C234 0.01
SW206 1
SW207 2
SW208 3
SW209 4
SW210 5
SW211 6
SW216 TAPE
SW215 TUNER
SW214 CD
SW213 AUX
SW212 PHONO
R243 10K
R249 47K
C230 0.1
IC201 TC9173P/F
R244 1.8K
R245 1.8K
R246 10K
R247 100K
R248 68K
DL204 LN424
DL203 LN424
DL202 LN424
DL201 LN424
DL200 LN424
R242 330
R241 330
R240 330
R239 330
R238 330
TAPE
TUNER
CD
AUX
PHONO
RM200
+5V
OUT
GND
R251 100K
D202 DS442
D203 DS442
R250 10K
SC200
CL
DI
CE
MW
LW
CD STOP
CD AUTO FUN
AMP MUTE
TAPE AUTO FUN
ST INPUT
SC201
REMOCON OUT
VT
AM IN
AM IF IN
INH
TUNER MUTE
ST MUTE
AUTO STOP
TUNED
SC202
L CH
GND
R CH
+15V
-15V
+12V(VT)
GND
+5.6V
+12V
GND
DL700 SLP-646B-50
JM700
ASSY,PCB,VOLUME IND
R217 220 1/4W
IC200 LA6458S
R216 220 1/4W
C218 47/16
C219 47 /16
C201 4.7/50
R201 220K
C205 220P
C204 220P
C200 4.7/50
C207 220P
C206 220P
R200 220K
R203 4.7K
C203 680P
C202 680P
R202 4.7K
R205 5.6K
C209 22/25
C208 22/25
R204 5.6K
C211 4.7/50
TREBLE VR201 2X100KSW
C210 4.7/50
BASS VR200 2X100KSW
R207 1.5K
R206 1.5K
C213 0.015
C212 0.015
BALANCE VR202 2X50KMN
C217 3.3/50
R211 390
R210 390
C216 3.3/50
Q201 2SC536
Q200 2SC536
C215 0.0082
C214 0.0082
R215 1.2K
R213 150K
R209 8.2K
R208 8.2K
R212 150K
R214 1.2K
ASSY,PCB,CONTROL
ASSY,PCB,VOLUME
C600 2200/10
IC203 LB1641
W600
W601
HL600
M
D204 GZA4.7Y
C232 0.01
C231 0.047
R236 10 1/2W FUSE
R237 1K
VR600 2X50KA
R600 2.2K
R601 2.2K
C601 0.01
HL606 CA606
C602 0.01
W602
W603

MAIN PRINTED CIRCUIT BOARD
(BOTTOM VIEW)


FM 75Ω ANTENNA
PHONO
AUX
POWER SUPPLY (MT-M90)
SPEAKERS (8Ω)
HEADPHONE JACK
PL300
PL301
PL302
CN300
CN301
CN302
CN303
CN304
CN305
CN306
CN307
CN350
CN360
IC300
IC301
IC302
IC303
IC304
IC305
IC306
IC307
IC308
IC309
IC310
IC311
IC312
T300
T301
T302
T303
T304
T305
T306
T307
T308
T310
T311
T312
T313
T314
T315
T316
T317
T318
T319
TM300
TM301
TP300
TP301
TP302
TP303
TP304
TP305
TP306
TP307
BF300
HL352
JM352
F300
F301
T2.5A
T2.5A
CF300
CF301
CF302
TC300
TC301
D342

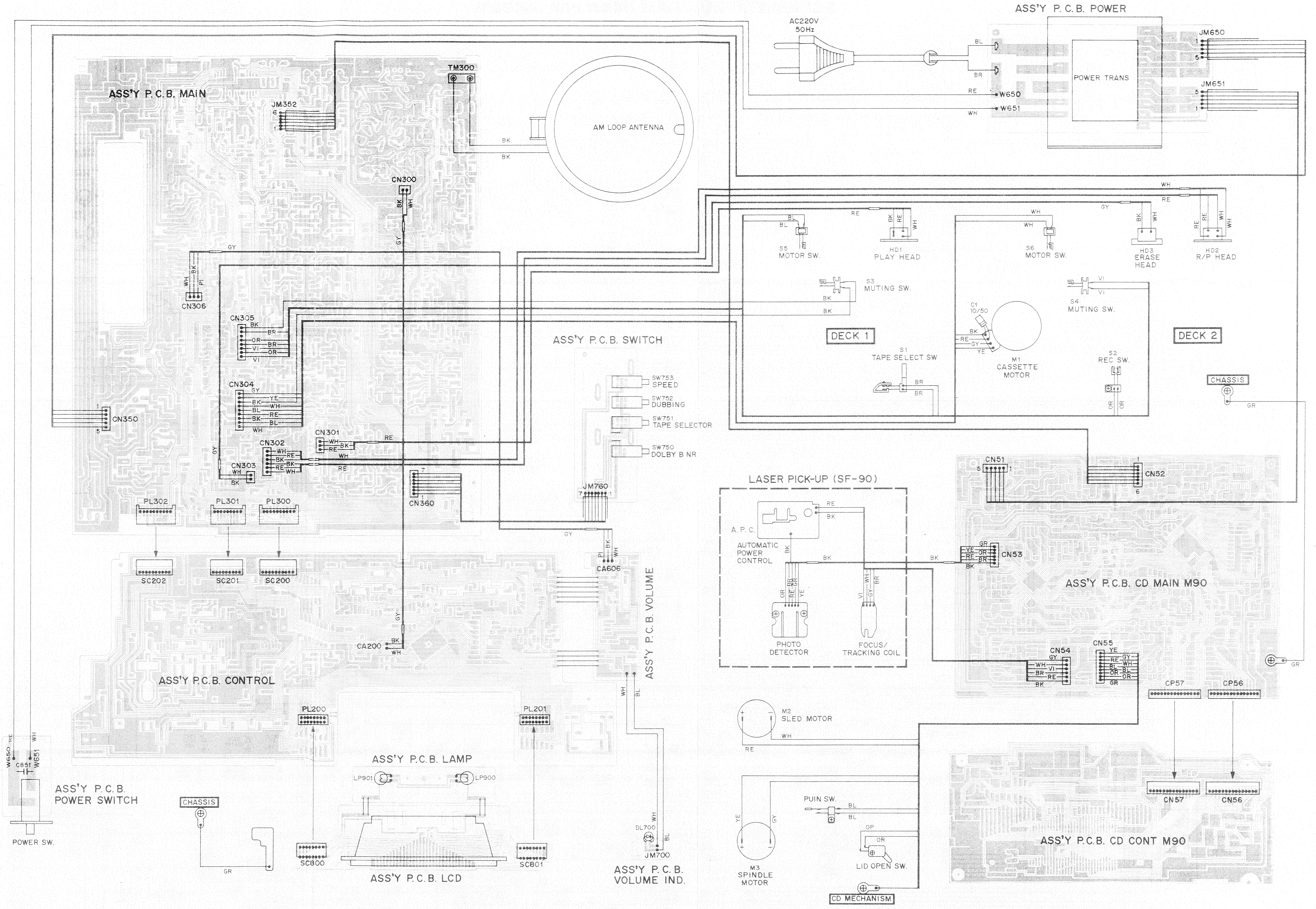
SCHEMATIC DIAGRAM (Main unit Section)


FM ANT 75 Ω
OS OUT
AM LOOP ANT
E.HEAD
DECK 2
DECK 1
L CH
R CH
PHONO
AUX
IC300 LA1266
IC301 LA3401
IC302 LA3246
IC303 UPC1330HA
IC304 HA12136A
IC305 LA6458DS
IC306 LC7821
IC307 MLC4001B
IC308 STK4142MK2
IC309 NJM79M15FA
IC310 L78M15ML
IC311 LA5667
IC312 NS ICP-5
T316 FILTER DOLBY
T317 FILTER DOLBY
M1 CASSETTE MOTOR
S5 MOTOR SW
S6 MOTOR SW
S3 MUTE SW
S4 MUTE SW
S2 REC SW
S1 TAPE SELECT SW
MECHA EARTH
ASSY.PCB.SW
SW750 DOLBY NR
SW751 TAPE SELECT DECK2
SW752 DUBBING
SW753 SPEED
ASSY.PCB.POWER SW
POWER SW
ASSY.PCB.MAIN
ASSY.PCB.POWER
POWER TRANS
AC220V 50HZ
BLUE
BROWN
H.P JACK
TO CD PCB
PL300 10P
PL301 9P
PL302 10P
CN300 2P
CN301 3P
CN302 6P
CN303 2P
CN304 9P
CN305 8P
CN306 3P
CN307 XH2P
CN350 5P
CN360 7P
JM352 HL352
JM760 HL760
HL650 JM650
HL651 JM651
TM301
F301 FUSE T2.5A
F300 FUSE T2.5A
R CH
GND
L CH
CD STOP
REMOCON OUT
CD AUTO FUN

NOTES:

1. All resistors are 1/4 watt or 1/6 watt 5% unless marked. Otherwise Resistor values are in ohms (K = 1000 ohms, M = 1000k ohms).
2. All capacitor values are in microfarads. (P = picofarads).
3. ⚠ is Safety Part. Use only replacement parts recommended by the manufacturer.
4. This is a basic schematic diagram.

WIRING DIAGRAM


ASS'Y P.C.B. POWER
AC220V
50Hz
BL
BR
RE
WH
W650
W651
POWER TRANS
JM650
JM651
ASS'Y P.C.B. MAIN
TM300
JM352
AM LOOP ANTENNA
BK
CN300
GY
CN306
CN305
CN304
CN350
CN301
CN302
CN303
CN360
PL302
PL301
PL300
ASS'Y P.C.B. SWITCH
SW753
SPEED
SW752
DUBBING
SW751
TAPE SELECTOR
SW750
DOLBY B NR
JM760
CA606
S5
MOTOR SW.
HD1
PLAY HEAD
S3
MUTING SW.
DECK 1
S1
TAPE SELECT SW
C1
10/50
M1
CASSETTE
MOTOR
S6
MOTOR SW.
HD3
ERASE
HEAD
HD2
R/P HEAD
S4
MUTING SW.
S2
REC SW.
DECK 2
CHASSIS
GR
CN51
CN52
LASER PICK-UP (SF-90)
A. P. C.
AUTOMATIC
POWER
CONTROL
PHOTO
DETECTOR
FOCUS/
TRACKING COIL
CN53
ASS'Y P.C.B. CD MAIN M90
CN54
CN55
CP57
CP56
SC202
SC201
SC200
CA200
ASS'Y P.C.B. VOLUME
ASS'Y P.C.B. CONTROL
PL200
PL201
ASS'Y P.C.B. LAMP
LP901
LP900
SC800
SC801
ASS'Y P.C.B. LCD
DL700
JM700
ASS'Y P.C.B.
VOLUME IND.
W650
W651
C851
ASS'Y P.C.B.
POWER SWITCH
POWER SW.
CHASSIS
M2
SLED MOTOR
M3
SPINDLE
MOTOR
PUIN SW.
LID OPEN SW.
CD MECHANISM
CN57
CN56
ASS'Y P.C.B. CD CONT M90

IC & TRANSISTOR LEAD REFERENCE VOLTAGES TABLE

Voltage Table of Main P.C.Board

		IC PIN NUMBERS DC VOLTAGES																			
Ref. No.	**DEVICE**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
IC300	LA1266	2.4V	2.4V	2.4V	0V	12.8V	12.8V	12.8V	3.9V	3.7V	2.1V	1.7V	3.1V	10.7V	1.6V	1.1V	0V	0V	2.5V	1.1V	0V
		21	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**
		3.9V	3.9V	3.9V	3.1V	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

		IC PIN NUMBERS DC VOLTAGES																			
Ref. No.	**DEVICE**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
IC301	LA3401	3.1V	3.1V	3.2V	3.2V	6.4V	3.1V	3.1V	6.4V	3.7V	0V	3.8V	0V	5.3V	4.8V	7.5V	0.5V	2.7V	2.4V	2.6V	2.6V
		21	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**
		3.3V	12.9V	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

		IC PIN NUMBERS DC VOLTAGES																			
Ref. No.	**DEVICE**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
IC302	LA3246	0V	0V	0.5V	4.4V	4.5V	0V	0V	4.4V	6.3V	0V	10.8V	10.8V	10.0V	0V	6.4V	4.4V	4.4V	0.5V	0V	0V
IC303	UPC1330HA	0V	0V	0V	0V	0V	11.8V	0V	0V	0V	–	–	–	–	–	–	–	–	–	–	–
IC304	HA12136A	5.9V	11.9V	5.9V	5.6V	0.2V	5.7V	1.2V	5.7V	5.7V	1.2V	5.7V	0V	0.8V	5.8V	0V	5.9V	–	–	–	–
IC305	LA6458DS	0V	0V	0V	-13.9V	0V	0V	0V	14.4V	–	–	–	–	–	–	–	–	–	–	–	–

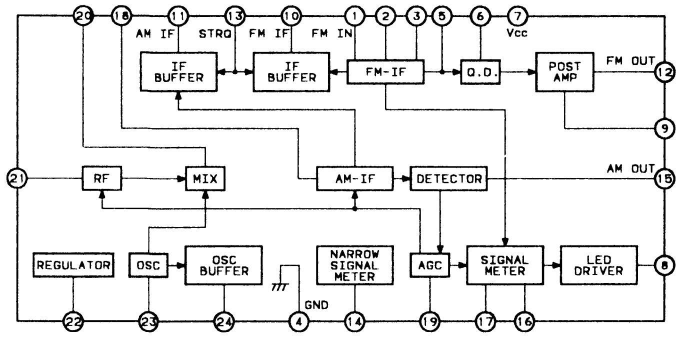
		IC PIN NUMBERS DC VOLTAGES																			
Ref. No.	**DEVICE**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
IC306	LC7821	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	-14.7V	0V	0V	0V	0V	0V	15.2V	15.2V	0V
		21	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**
		0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	–	–	–	–	–	–	–	–	–	–

		IC PIN NUMBERS DC VOLTAGES																	
Ref. No.	**DEVICE**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**
IC307	GD4001B	0V	0V	13.4V	13.4V	0V	0V	0V	12.9V	12.9V	0V	13.4V	0V	0V	13.4V	–	–	–	–
IC308	STK4142	-0.1V	-0.1V	0V	-29.6V	-1.2V	0V	-31.6V	-32.2V	-32.7V	0V	32.6V	31.0V	0V	-32.6V	-1.2V	0V	-0.1V	-0.1V
IC309	NJM79M15	0V	-28.2V	-14.7V	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
IC310	L78M15ML	26.6V	0V	15.3V	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
IC311	LA5667	20.0V	0V	5.0V	20.0V	5.6V	15.0V	13.4V	–	–	–	–	–	–	–	–	–	–	–

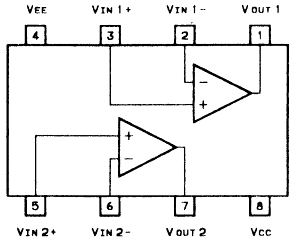
TRANSISTOR DC VOLTAGES (MAIN)														
Ref. No.	**DEVICE**	**B**	**C**	**E**	**Ref. No.**	**DEVICE**	**B**	**C**	**E**	**Ref. No.**	**DEVICE**	**B**	**C**	**E**
Q301	2SC2999	0.6V	12.4V	0V	Q327	2SC3400	0V	0V	0V	Q350	2SD1012	0V	10.9V	0V
Q302	2SC2999	0V	12.3V	5.6V	Q328	2SC3400	0V	0V	0V	Q351	2SC3708	0V	0V	0V
Q305	2SC2839	2.0V	12.7V	1.3V	Q329	2SC3400	0V	0.3V	0V	Q352	2SC3400	0V	13.4V	0V
Q306	2SC536	0V	4.1V	0V	Q330	2SC3400	0V	0V	0V	Q353	2SA1346	13.4V	0V	13.4V
Q308	2SD1012	0.6V	0V	0V	Q331	2SC3400	7.8V	0V	0V	Q354	2SC3400	0V	4.1V	0V
Q309	2SC3400	0.1V	2.9V	0V	Q332	2SC3400	7.8V	0V	0V	Q355	2SC3400	12.2V	0V	0V
Q310	2SC3402	0.1V	12.6V	0V	Q333	2SC536	0V	0.6V	0V	Q356	2SC536	0V	13.4V	0.5V
Q311	2SC3402	0.1V	12.6V	0V	Q334	2SC536	0V	0V	0V	Q357	2SC536	0.2V	1.5V	0.2V
Q312	2SA1345	0V	1.1V	1.1V	Q335	2SC3400	0V	7.8V	0V	Q358	2SC536	0.3V	0V	0V
Q313	2SC3400	0V	10.8V	0V	Q336	2SC3400	12.8V	0V	0V	Q359	2SC536	0V	0V	0.1V
Q314	2SA1346	12.7V	0V	12.8V	Q337	2SA1346	3.8V	13.4V	13.4V	Q360	2SD1012	0V	0V	0V
Q315	2SC3400	0V	12.7V	0V	Q338	2SC536	0V	0V	0V	Q361	2SD1012	0V	0V	0V
Q316	2SC3399	3.9V	0V	0V	Q339	2SA1346	0V	0V	12.8V	Q362	2SC3400	4.8V	0V	0V
Q317	2SC536	0.6V	0V	0V	Q340	2SA1346	13.4V	-3.6V	13.4V	Q363	2SA1346	14.8V	-0.1V	15.1V
Q318	2SC536	0.6V	0V	0V	Q341	2SC3400	0V	0V	0V	Q364	2SD1913	12.3V	20.2V	11.9V
Q319	2SC536	0.6V	0V	0V	Q342	2SC3400	0V	1.2V	0V	Q365	2SD1913	12.5V	20.2V	11.9V
Q320	2SC3400	0V	4.9V	0V	Q343	2SC3400	0V	0V	0V	Q366	2SC3331	6.5V	12.3V	6.0V
Q321	2SC536	0.6V	0V	0V	Q344	2SC3400	0V	11.0V	0V	Q367	2SC3331	6.6V	12.3V	6.0V
Q322	2SC536	0.6V	0V	0V	Q345	2SC3400	0V	0V	0V			**D**	**G**	**S**
Q323	2SC536	-3.7V	0V	0V	Q346	2SC3400	7.8V	0V	0V	Q300	3SK73	0V	0V	
Q324	2SC536	0V	0V	0V	Q347	2SB808	11.3V	11.9V	0V	Q303	2SK544	12.1V	0V	0V
Q325	2SC3331	0V	4.5V	1.6V	Q348	2SC3400	0V	0V	0V	Q304	2SK544	11.9V	0V	0V
Q326	2SC3331	1.6V	4.2V	1.0V	Q349	2SC536	0V	0V	0V	Q307	2SK246	0V	1.7V	2.7V

IC BLOCK DIAGRAM

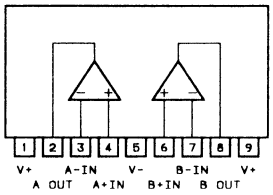
LA1266 BLOCK DIAGRAM


20
18
11
13
10
1
2
3
5
6
7
AM IF
STRQ
FM IF
FM IN
Vcc
IF BUFFER
IF BUFFER
FM-IF
Q.D.
POST AMP
FM OUT
12
9
21
RF
MIX
AM-IF
DETECTOR
AM OUT
15
REGULATOR
OSC
OSC BUFFER
NARROW SIGNAL METER
AGC
SIGNAL METER
LED DRIVER
8
GND
22
23
24
4
14
19
17
16

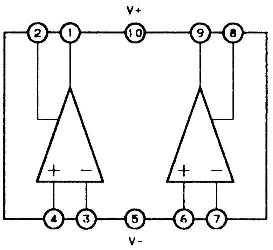
LA6458DS BLOCK DIAGRAM


VEE
VIN 1+
VIN 1-
VOUT 1
4
3
2
1
5
6
7
8
VIN 2+
VIN 2-
VOUT 2
Vcc

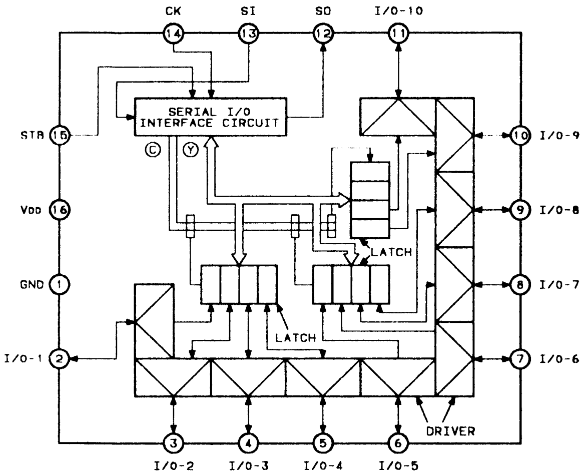
LA6458S BLOCK DIAGRAM


1
2
3
4
5
6
7
8
9
V+
A-IN
V-
B-IN
V+
A OUT
A+IN
B+IN
B OUT

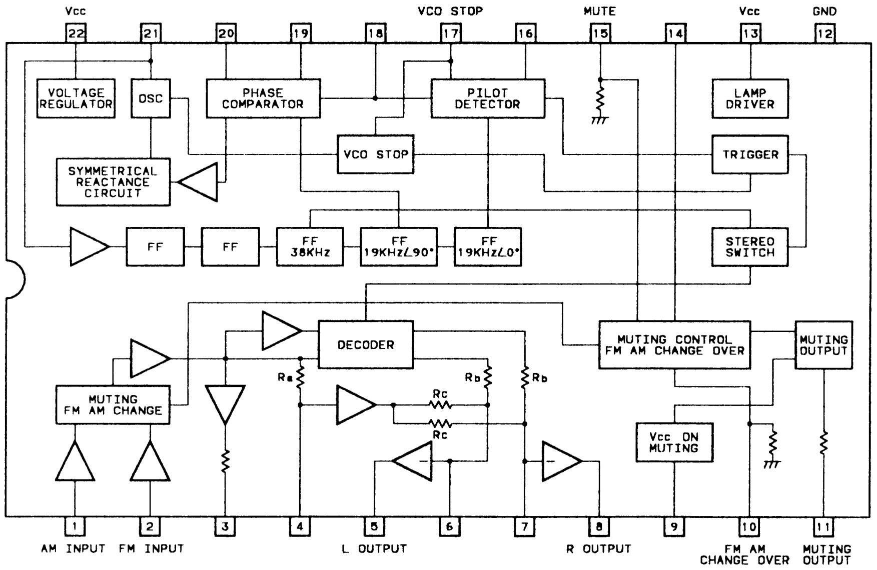
LA6510 BLOCK DIAGRAM


V+
2
1
10
9
8
4
3
5
6
7
V-

TC9173P BLOCK DIAGRAM

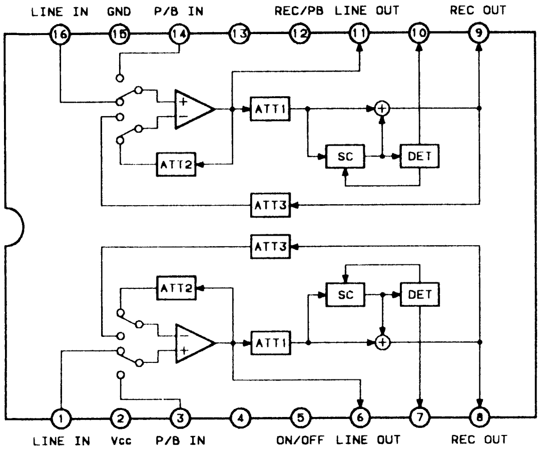

CK
SI
SO
I/O-10
14
13
12
11
STB 15
VDD 16
GND 1
I/O-1 2
SERIAL I/O INTERFACE CIRCUIT
C
Y
LATCH
LATCH
10 I/O-9
9 I/O-8
8 I/O-7
7 I/O-6
DRIVER
3
4
5
6
I/O-2
I/O-3
I/O-4
I/O-5

LA3401 BLOCK DIAGRAM

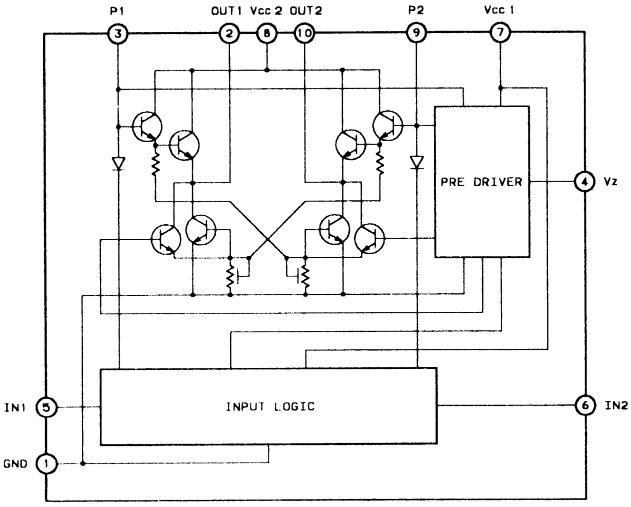

Vcc
VCO STOP
MUTE
Vcc
GND
22
21
20
19
18
17
16
15
14
13
12
VOLTAGE REGULATOR
OSC
PHASE COMPARATOR
PILOT DETECTOR
LAMP DRIVER
VCO STOP
TRIGGER
SYMMETRICAL REACTANCE CIRCUIT
FF
FF
FF 38KHz
FF 19KHz∠90°
FF 19KHz∠0°
STEREO SWITCH
DECODER
MUTING CONTROL FM AM CHANGE OVER
MUTING OUTPUT
MUTING FM AM CHANGE
Ra
Rb
Rb
Rc
Rc
Vcc ON MUTING
1
2
3
4
5
6
7
8
9
10
11
AM INPUT
FM INPUT
L OUTPUT
R OUTPUT
FM AM CHANGE OVER
MUTING OUTPUT

IC BLOCK DIAGRAM (Continued)

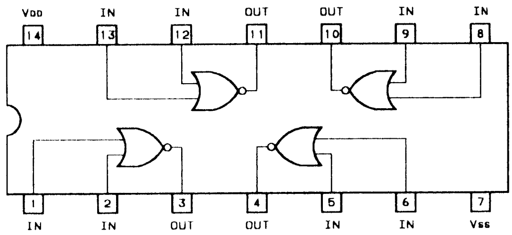
HA12136A BLOCK DIAGRAM


LINE IN
GND
P/B IN
REC/PB LINE OUT
REC OUT
16
15
14
13
12
11
10
9
ATT1
ATT2
ATT3
SC
DET
1
2
3
4
5
6
7
8
LINE IN
Vcc
P/B IN
ON/OFF
LINE OUT
REC OUT

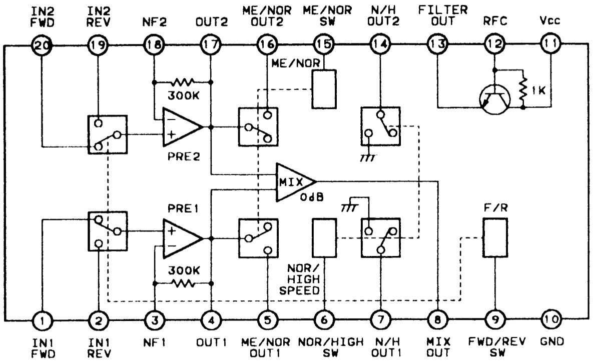
LB1641 BLOCK DIAGRAM


P1
OUT1
Vcc 2
OUT2
P2
Vcc 1
3
2
8
10
9
7
PRE DRIVER
4
Vz
IN1
5
INPUT LOGIC
6
IN2
GND
1

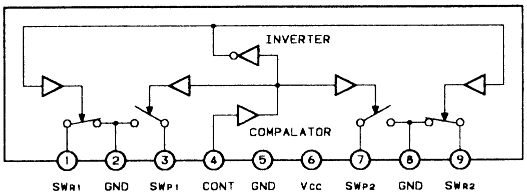
GD4001B BLOCK DIAGRAM


VDD
IN
IN
OUT
OUT
IN
IN
14
13
12
11
10
9
8
1
2
3
4
5
6
7
IN
IN
OUT
OUT
IN
IN
VSS

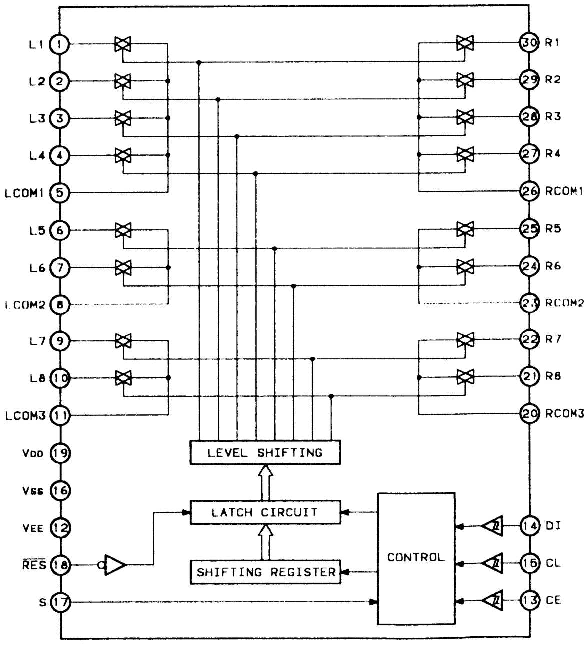
LA3246 BLOCK DIAGRAM


IN2 FWD
IN2 REV
NF2
OUT2
ME/NOR OUT2
ME/NOR SW
N/H OUT2
FILTER OUT
RFC
Vcc
20
19
18
17
16
15
14
13
12
11
ME/NOR
300K
1K
PRE2
MIX
0dB
PRE1
F/R
300K
NOR/ HIGH SPEED
1
2
3
4
5
6
7
8
9
10
IN1 FWD
IN1 REV
NF1
OUT1
ME/NOR OUT1
NOR/HIGH SW
N/H OUT1
MIX OUT
FWD/REV SW
GND

UPC1330HA BLOCK DIAGRAM

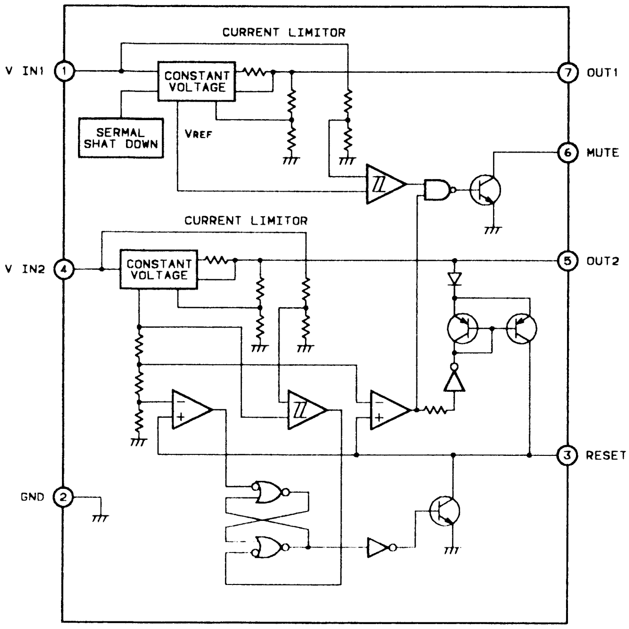

INVERTER
COMPALATOR
1
2
3
4
5
6
7
8
9
SWR1
GND
SWP1
CONT
GND
Vcc
SWP2
GND
SWR2

LC7821 BLOCK DIAGRAM

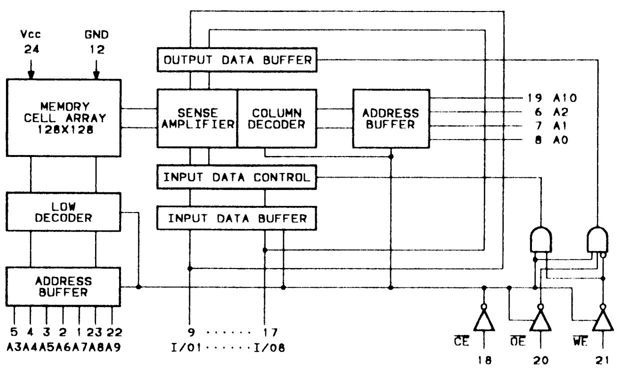

L1
L2
L3
L4
LCOM1
L5
L6
LCOM2
L7
L8
LCOM3
VDD
VSS
VEE
RES
S
1
2
3
4
5
6
7
8
9
10
11
19
16
12
18
17
30
29
28
27
26
25
24
23
22
21
20
14
15
13
R1
R2
R3
R4
RCOM1
R5
R6
RCOM2
R7
R8
RCOM3
LEVEL SHIFTING
LATCH CIRCUIT
SHIFTING REGISTER
CONTROL
DI
CL
CE

IC BLOCK DIAGRAM (Continued)

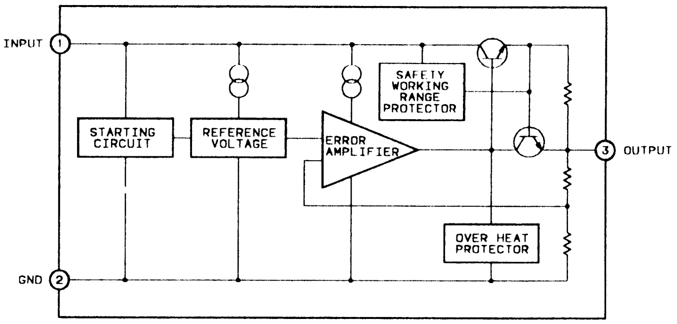
LA5667 BLOCK DIAGRAM


CURRENT LIMITOR
V IN1
1
CONSTANT VOLTAGE
7
OUT1
SERMAL SHAT DOWN
VREF
6
MUTE
CURRENT LIMITOR
V IN2
4
CONSTANT VOLTAGE
5
OUT2
3
RESET
GND
2

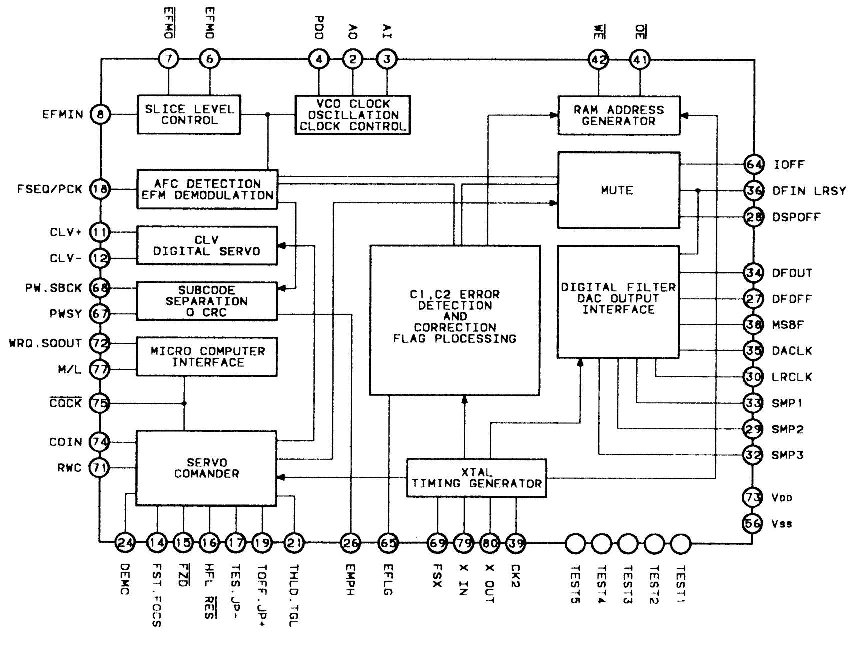
LC3517BS-15 BLOCK DIAGRAM


Vcc
24
GND
12
MEMORY CELL ARRAY 128X128
OUTPUT DATA BUFFER
SENSE AMPLIFIER
COLUMN DECODER
ADDRESS BUFFER
19 A10
6 A2
7 A1
8 A0
INPUT DATA CONTROL
LOW DECODER
INPUT DATA BUFFER
ADDRESS BUFFER
5 4 3 2 1 23 22
A3A4A5A6A7A8A9
9 ······· 17
I/01 ······ I/08
$\overline{\text{CE}}$
18
$\overline{\text{OE}}$
20
$\overline{\text{WE}}$
21

L78M15ML BLOCK DIAGRAM

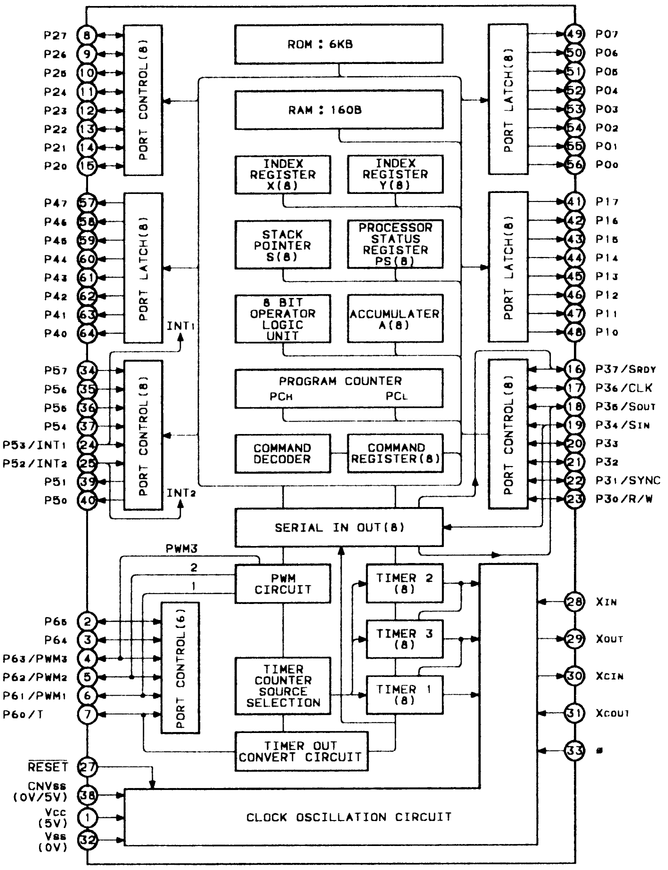

INPUT
1
SAFETY WORKING RANGE PROTECTOR
STARTING CIRCUIT
REFERENCE VOLTAGE
ERROR AMPLIFIER
3
OUTPUT
OVER HEAT PROTECTOR
GND
2

LC7860K BLOCK DIAGRAM


$\overline{\text{EFMO}}$
EFMO
PDO
AO
AI
$\overline{\text{WE}}$
$\overline{\text{OE}}$
7
6
4
2
3
42
41
EFMIN 8
SLICE LEVEL CONTROL
VCO CLOCK OSCILLATION CLOCK CONTROL
RAM ADDRESS GENERATOR
FSEQ/PCK 18
AFC DETECTION EFM DEMODULATION
MUTE
64 IOFF
36 DFIN LRSY
28 DSPOFF
CLV+ 11
CLV- 12
CLV DIGITAL SERVO
C1,C2 ERROR DETECTION AND CORRECTION FLAG PLOCESSING
DIGITAL FILTER DAC OUTPUT INTERFACE
PW.SBCK 68
PWSY 67
SUBCODE SEPARATION Q CRC
34 DFOUT
27 DFOFF
38 MSBF
35 DACLK
30 LRCLK
WRQ.SQOUT 72
M/L 77
MICRO COMPUTER INTERFACE
$\overline{\text{CQCK}}$ 75
33 SMP1
29 SMP2
32 SMP3
COIN 74
RWC 71
SERVO COMANDER
XTAL TIMING GENERATOR
73 VDD
56 Vss
24 DEMC
14 FST.FOCS
15 $\overline{\text{FZD}}$
16 HFL $\overline{\text{RES}}$
17 TES.JP-
19 TOFF.JP+
21 THLD.TGL
26 EMPH
65 EFLG
69 FSX
79 X IN
80 X OUT
39 CK2
TEST5
TEST4
TEST3
TEST2
TEST1

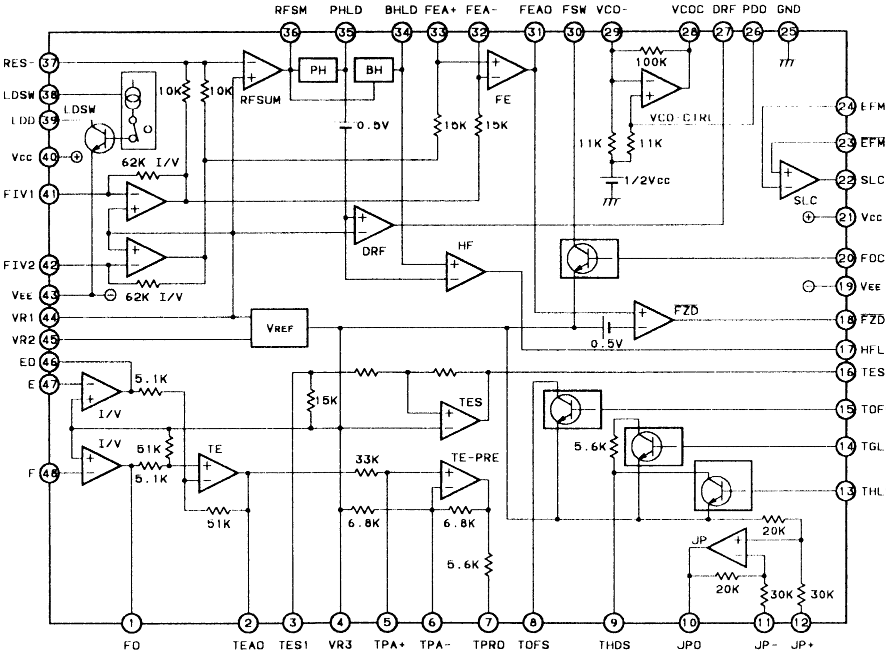
IC BLOCK DIAGRAM (Continued)

M50954-125SP BLOCK DIAGRAM



P27 P26 P25 P24 P23 P22 P21 P20
P47 P46 P45 P44 P43 P42 P41 P40
P57 P56 P55 P54 P53/INT1 P52/INT2 P51 P50
P65 P64 P63/PWM3 P62/PWM2 P61/PWM1 P60/T
RESET
CNVSS (0V/5V)
Vcc (5V)
VSS (0V)
PORT CONTROL(8)
PORT LATCH(8)
PORT CONTROL(8)
PORT CONTROL(6)
INT1
INT2
ROM : 6KB
RAM : 160B
INDEX REGISTER X(8)
INDEX REGISTER Y(8)
STACK POINTER S(8)
PROCESSOR STATUS REGISTER PS(8)
8 BIT OPERATOR LOGIC UNIT
ACCUMULATER A(8)
PROGRAM COUNTER PCH PCL
COMMAND DECODER
COMMAND REGISTER(8)
SERIAL IN OUT(8)
PWM3
2
1
PWM CIRCUIT
TIMER 2 (8)
TIMER 3 (8)
TIMER 1 (8)
TIMER COUNTER SOURCE SELECTION
TIMER OUT CONVERT CIRCUIT
CLOCK OSCILLATION CIRCUIT
PORT LATCH(8)
PORT LATCH(8)
PORT CONTROL(8)
P07 P06 P05 P04 P03 P02 P01 P00
P17 P16 P15 P14 P13 P12 P11 P10
P37/SRDY P36/CLK P35/SOUT P34/SIN P33 P32 P31/SYNC P30/R/W
XIN XOUT XCIN XCOUT

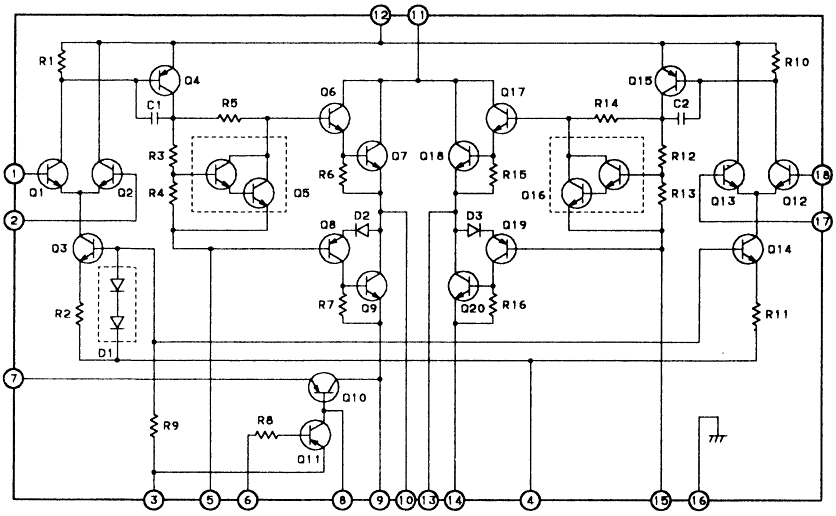
LA9200NM BLOCK DIAGRAM



RFSM PHLD BHLD FEA+ FEA- FEAO FSW VCO- VCOC DRF PDO GND
RES- LDSW LDD Vcc VEE FIV1 FIV2 VR1 VR2 EO E F
LDSW
10K 10K
RFSUM
PH BH
0.5V
FE
15K 15K
100K
VCO CIRL
11K 11K
1/2Vcc
62K I/V
62K I/V
DRF
HF
VREF
FZD
0.5V
5.1K
I/V
I/V
51K
5.1K
TE
51K
15K
TES
33K
TE-PRE
6.8K 6.8K
5.6K
5.6K
SLC
JP
20K
20K
30K 30K
EFMO EFMO SLCO Vcc FOCS VEE FZD HFL TES TOFF TGL THLD
FO TEAO TES1 VR3 TPA+ TPA- TPRO TOFS THDS JPO JP- JP+

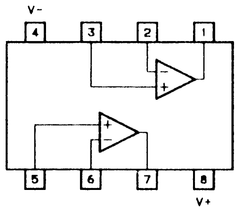
IC BLOCK DIAGRAM (Continued)

STK4142MK2 BLOCK DIAGRAM



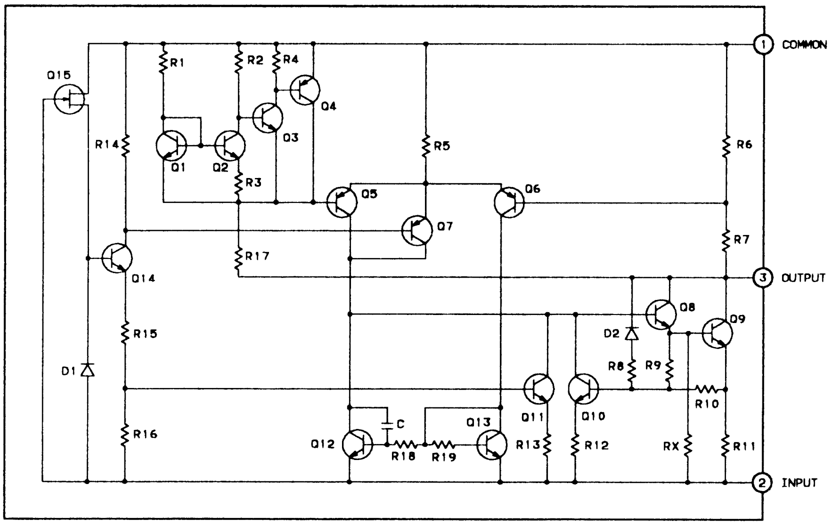
12
11
R1
Q4
C1
R5
Q6
Q17
R14
C2
Q15
R10
R3
R6
Q7
Q18
R15
R12
R4
Q5
Q16
R13
Q1
Q2
Q13
Q12
1
18
2
17
D2
Q8
D3
Q19
Q3
Q14
R7
Q9
Q20
R16
R2
R11
D1
7
Q10
R9
R8
Q11
3
5
6
8
9
10
13
14
4
15
16

UPC4570C BLOCK DIAGRAM



V-
4
3
2
1
5
6
7
8
V+

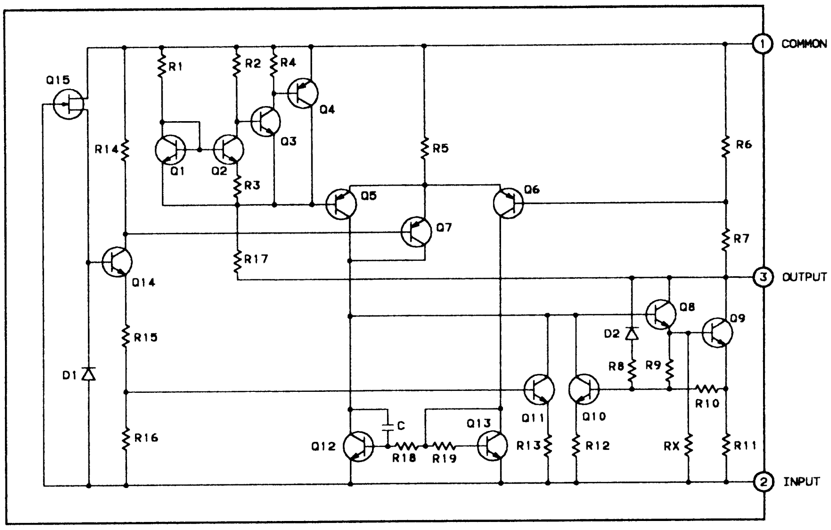
NJM79L05A BLOCK DIAGRAM



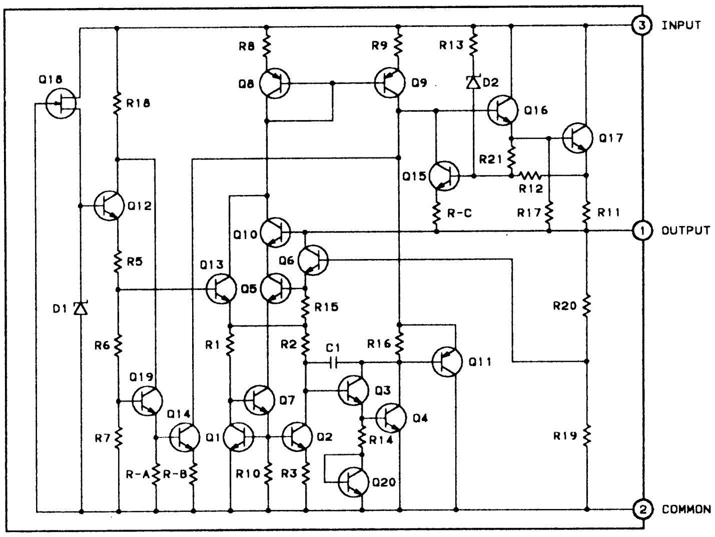
1 COMMON
Q15
R1
R2
R4
Q4
Q3
R14
Q1
Q2
R3
R5
R6
Q5
Q6
Q7
R7
Q14
R17
3 OUTPUT
Q8
Q9
R15
D2
R8
R9
D1
R10
Q11
Q10
C
Q13
R16
Q12
R18
R19
R13
R12
RX
R11
2 INPUT

IC BLOCK DIAGRAM (Continued)

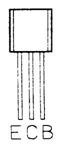
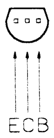
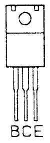
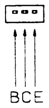
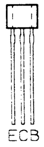
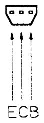
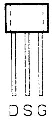
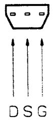
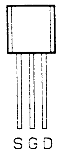
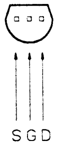
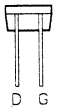
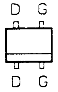
NJM79M15FA BLOCK DIAGRAM


Q15
R1
R2
R4
Q4
R14
Q1
Q2
Q3
R3
R5
R6
Q5
Q6
Q7
R17
R7
Q14
R15
D1
Q8
D2
Q9
R8
R9
R10
Q11
Q10
C
Q12
R16
R18
R19
Q13
R13
R12
RX
R11
1 COMMON
3 OUTPUT
2 INPUT

NJM78M05FA BLOCK DIAGRAM


3 INPUT
R8
R9
R13
Q18
Q8
Q9
D2
R18
Q16
Q17
R21
Q15
R12
Q12
R-C
R17
R11
1 OUTPUT
Q10
Q6
R5
Q13
Q5
R15
R20
D1
R6
R1
R2
C1
R16
Q11
Q19
Q3
Q7
Q14
Q4
R7
Q1
Q2
R14
R19
R-A
R-B
R10
R3
Q20
2 COMMON

IC & TRANSISTOR LEAD IDENTIFICATION

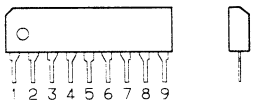
TRANSISTOR	FRONT VIEW	BOTTOM VIEW	TRANSISTOR	FRONT VIEW	BOTTOM VIEW
2SA608 2SC3331 2SC3708 2SC536			2SD1913		
2SA1317 2SA1345 2SA1346 2SB808 2SC2839 2SC2999 2SC3399 2SC3400 2SC3402 2SC536 2SD1012			2SK544		
2SK246			3SK73		

TERMINAL NAME

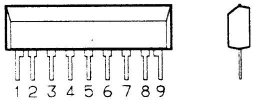
B → BASE
C → COLLECTOR
E → EMITTER

S → SOURCE
G → GATE
D → DRAIN

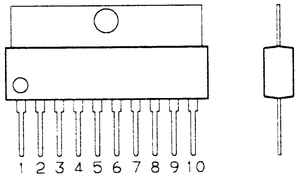
LA6458S FRONT/SIDE VIEWS



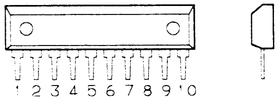
UPC1330HA FRONT/SIDE VIEWS



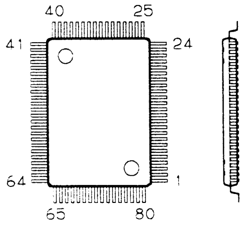
LA6510 FRONT/SIDE VIEWS


1 2 3 4 5 6 7 8 9 10

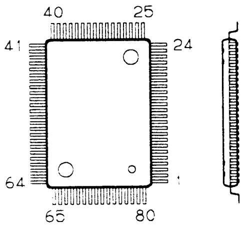
LB1641 FRONT/SIDE VIEWS


1 2 3 4 5 6 7 8 9 10

LC7860K TOP/SIDE VIEWS


40
25
41
24
64
1
65
80

TC9309F-008 TOP/SIDE VIEWS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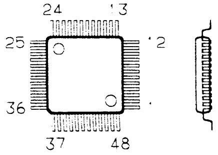
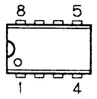
25
41
24
64
1
65
80

LA9200NM TOP/SIDE VIEWS

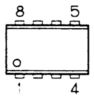

24
13
25
12
36
1
37
48

IC & TRANSISTOR LEAD IDENTIFICATION (Continued)

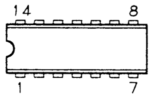
UPC4570C TOP VIEW



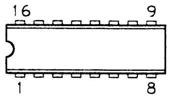
LA6458DS TOP VIEW



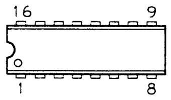
GD4001B TOP VIEW



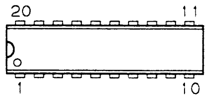
TC9173P TOP VIEW



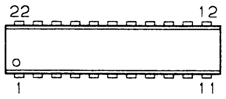
HA12136A TOP VIEW



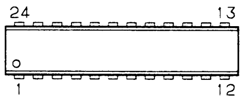
LA3246 TOP VIEW



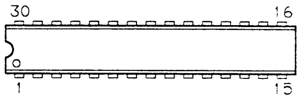
LA3401 TOP VIEW



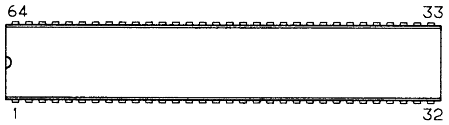
LA1266 TOP VIEW
LC3517BS-15 TOP VIEW



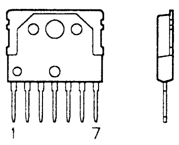
LC7821 TOP VIEW



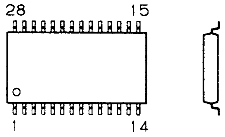
M50954-125SP TOP VIEW



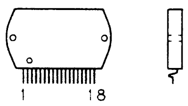
LA5667 FRONT/SIDE VIEWS



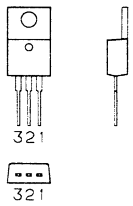
LC97000P-288 TOP/SIDE VIEWS



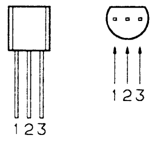
STK4142MK2 FRONT/SIDE VIEWS



NJM78M05FA TOP/SIDE VIEWS



NJM79L05A TOP/SIDE VIEWS



L78M15ML TOP/SIDE VIEWS
NJM79M15FA TOP/SIDE VIEWS